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Original Articles.

A MODIFIED OPERATION FOR CYSTOCELE.

Remarks before the Cincinnati Obstetrical Society, June 11th, 1885, by THAD. A. REAMY, M.D., Professor of Obstetrics and Clinical Gynecology in the Medical College of Ohio.

Gentlemen: Contrary to the custom of the Society, I will make a verbal instead of a written presentation of the subject assigned me. I do not desire to offer a new operation, but only a modification of the operations already proposed for the relief of cystocele. I will not go into the causes of cystocele any further than to bring forward the facts necessary to explain the operation proposed.

It is well known that Scanzoni advocated the doctrine that cystocele may exist primarily without a prolapsus of the anterior wall of the vagina or other conditions of the vagina to cause it, the vaginal prolapsus being secondary and dependent upon the cystocele. He supposes that in these cases there is spasm of the fibres of the body of the bladder, while the neck is quiet—the urine thus forced to remain in the fundus, dilating it and producing the cystocele. This view is adopted by many, but is discarded by most authors.

Cystocele is rarely found in women who have not borne children. It is rarely disassociated with deformity of the vagina. The walls of the vagina in such cases have been altered in their conditions, in their relations, and in their thickness. In short we have a prolapsus, and this is especially the case if there is any great degree of cystocele. The bladder is to a great extent held in position by the firmness and supporting power of the vaginal walls, the relations being intimate, and so long as the vagina maintains its proper strength, its proper size and relations, there can be little or no cystocele. It is now stoutly denied, especially by my friend, Dr. Frank P. Foster, of New York, that the vagina or perineum have anything to do in supporting the uterus. Be this as it may it is clear that loss of the perineum and associate deformity of the vagina, play a very important role in cystocele, and this fact must be considered both in a study of causes and devising methods of treatment. Of course, we all know that generally in these cases one of the most

troublesome symptoms is irritability of the bladder, although even this is held in question by some. I need not dwell longer on this part of the subject, as I am speaking to practitioners, not to students or beginners.

Now, the question is, what can be done for the relief of this condition? and it was to illustrate the operation for this that I brought the subject before you this evening. We know that the first and simplest methods which are employed are those which aim to hold the bladder in place by pessaries, etc. Dr. Skene has devised a pessary which is one of the very best within my knowledge. There are many others with which, of course, you are familiar. In simple cases these devices do very well indeed; but even in such cases they seldom accomplish a cure, operative measures becoming a necessity. I am well aware of the fact that in any surgical measure yet devised, we have not in all cases, even permanent relief, much less cure. Indeed there are many who deny that permanent relief is obtained by any surgical or other measures in any case. With these views I cannot agree. My own clinical experience fully warrants me in dissenting. In almost every case where there is not serious uterine prolapsus, as well as prolapsus of the vagina and bladder, permanent relief may be expected provided the surgery be well done. But, of course, in cases where there is perineal loss, with vaginal deformity and prolapse, the operation for cystocele proper must, in every instance, be associated with or supplemented by perineorrhaphy and, if necessary, colporrhaphy. The fallacies which are held by so many on this subject, in my judgment, have their origin chiefly in the erroneous conclusion that because it is difficult, and in many cases impossible to cure a uterine prolapsus, it is, therefore, impossible to cure a vaginal prolapsus, forgetting that the former frequently exists for a time without the latter; although it must be recognized by all that sooner or later the uterine displacement will generally follow as an inevitable result of the dragging of that organ by the prolapsed vagina and bladder. It is true the weight of the vagina is not great, though under such circumstances it is generally increased above normal, for subinvolution of the vagina is almost uniformly present; nevertheless the weight is quite sufficient to cause the evil. It is not the amount of weight, but the direction and character of the dragging that finally accomplish the bad results. I may as well here as elsewhere declare my belief that, in addition to this dragging upon the uterus, there is the negative influence: absence of such support as the normal vagina gives to the uterus. Unpopular as this view is at the present day, I still believe that this support is not wholly a myth, although in former time it has unquestionably been overestimated.

But as to surgical methods, I shall only refer to those proposed by Dieffenbach, Sims and Emmet, though there are many others of merit. The method of Dieffenbach, as all know, consists of an eliptical denudation from the anterior vaginal wall, closing the edges by suture. When

well done, union is firm, and in simple and mild cases the result is satisfactory. But in bad cases the extent of denudation necessary causes deformity of the vagina when the cure is effected. Sims' method consists of an elliptical denudation as in the method of Dieffenbach, but the whole surface is not denuded, only a narrow strip, forming the ellipse, the centre being undenuded thus (see blackboard). There are two important objections to this method. First, at the middle of the ellipse especially, so great is the tension upon the sutures, that they are liable to cut out at once. Secondly, when union is secured, the paths of denudation and of union are so narrow that in a short time the newly united tissue will have stretched under the tension to which it must be subjected, and the benefits of the operation are lost. These are just the same objections which exist against both Sims' and Emmet's operations for prolapsus of the posterior vaginal wall, the principles are the same, no matter which wall is to be treated.

For Emmet's latest operations, I must refer you to the figures in his book (Principles and Practice of Gynecology, third edition, page 362–3). It will be seen that the lines of denudation follow no geometrical rules, and can not be described.

Two-thirds of the figure next to the uterus are in form not unlike the ellipse of Sims or Dieffenbach.

The remaining portion is crescent-shaped with its concavity toward the urethra. These lines are approximated and union occurs. The old objections again arise: First, there is a portion in the centre undenuded, so that should union occur the tissues must yield in time. Second, as this distinguished author himself confesses, union at the triangular angles is difficult to obtain, a second operation often being necessary.

This last objection, Dr. Emmet thinks, he has now succeeded in overcoming by another modification which I do not detain you to describe, as you have access to his better description in his valuable text-book. It is sufficient for my purpose to say, that in the modified operation one crescentic line of denudation crosses the base of the urethra with its convexity toward the meatus. Another similar line crosses the upper portion of the vagina with its concavity toward the uterus. This author, with the candor for which he has such just reputation, admits that he has tested the method in but few cases and can not yet tell how it will stand the test of clinical experience. I must state my objection that this method also leaves the central portion of mucous membrane undenuded, so that it seems probable that the parts will yield.

As to my own method, I have followed it in public hospitals and private practice for eight years, with very satisfatory results in favorable cases. I think it has some important advantages.

For the operation, the patient is placed in the extreme lithotomy position, an assistant holding each lower extremity, the posterior vaginal wall

held back by Sim's speculum. The tissues are caught up by a small double-toothed tenaculum forceps, and the cutting is done with long scissors, sharp-pointed, curved on the flat—the same as used in perineorrhaphy. A constant stream of water at 100°F. is allowed to play on the field of denudation, the water being carbolized. This controls hemorrhage and keeps the field clear.

I beg to refer you to the imperfect figure which I now draw on the blackboard, which explains the direction and extent of denudation, also the method of suturing and closing.

Fig. 1. Illustrates practically the direction of the denudation, but of course this will vary with the amount of cystocele you are dealing with and the amount of tissue you desire to remove.

Fig. 1.

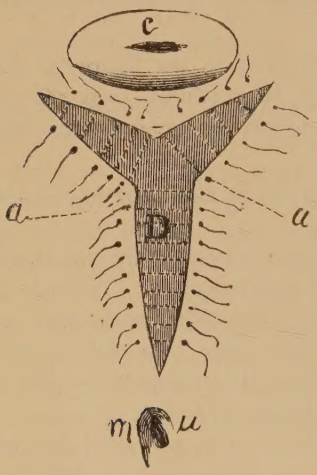

Fig. 2.

Fig. 1.—D., denuded surface. The lines of denudation are sharply defined, so that when the sutures are tightened they shoulder against each other, and firm union is secured. Ordinarily no cicatricial tissue is found in the line of union. *a*. This suture approximates the three angles. *c*. Cervix. *m.u.* Meatus urinarius.

Fig. 2. Position of parts after sutures are tightened so as to approximate the edges bounding the field of denudation. Sutures tied.

The denudation is also modified in width or length as each case requires. If you desire to cut deeply, you must remember to avoid wounding the ureters as you denude the lateral branches. There is, however, substantially no danger of this unless you carry the arms some distance out beyond the cervix. I have never encountered this accident, but theoretically the danger does exist. I will call your attention later to the importance of carrying the denudation deep, and sometimes even into the bladder.

With regard to the position of the ureters, you will see by looking at plate No. 3, by Savage, that the relation is given. The bladder-wall is

cut away, showing the relation of the cervix to the entrance of the ureters into the bladder, and it shows you the direction followed by the ureters as they enter.

The inquiry as to results might be stated as Thomas puts it. He says it is not material what direction the denudation may take, provided you get rid of sufficient redundant tissue (or words to that effect) and take up the pouch that is present, for it will contract from all directions. But you can readily see that the uterus is one fixed point, the meatus another, and the greatest amount of redundant tissue is situated just forward of the cervix. Now you can see a step further, that if you carry the arms of your denudation on either side of the cervix, the direction of the contraction will be directly in harmony with the original construction of the parts, and that the contraction, if you get union, will be in the very direction in which you desire to get support. Further, in this method the tissues can be safely subjected to greater traction than they can bear in any other method of procedure. In the clinical use of the method you will find that you do not have to denude so large a field in order to get sufficient contraction, or, rather, no one path of denudation is so wide.

Now, a word in regard to the depth of the denudation. As you come down toward the urethra, you can denude very deeply, but it is not necessary to go so deep there, as it is further up towards the bifurcation of the denudation.

Here, however, if you simply take off the mucous membrane, and do not go through the muscular tissues of the vagina into the cellular tissue between vagina and bladder, the operation will fail, and because you can denude so deeply with safety by this plan is one of its chief advantages. In two cases in which I desired to cut deep, I have opened the bladder and formed a vesico-vaginal fistula, but I closed it up at once with the sutures of the operation for cystocele, and nothing untoward occurred. Denude deeply, for the more deeply within limits the more certain you will be to get good results. As already stated, at the upper extremities of the denudation it is better not to go too deeply, on account of the ureters. But that danger, as stated, I do not regard as great.

The sutures are placed in much the same manner as in the other operations, only it is important that they be placed close together. I usually put as many as eight to the linear inch of the denudation. It is important that the suture marked "a" be placed as represented in the drawing. This is for the purpose of drawing the three arms of the Y together, when the stitch is drawn tight. The consequence is that the tissue is pulled forward and backward, and, the uterus being more fixed than the other parts, the tissue is put upon the stretch transversely also. It is immaterial whether the threads show on the denuded surface, or simply split the tissues in the middle of the denuded surface. Even if the suture should go into the bladder it will do no harm. It is important to get the border surfaces united perfectly by first intention.

The kind of suture I am using is the so-called silkworm gut, out of which fish-lines are made. It is really made of the intestines of a fish, it is an animal ligature, and you can with ease render it perfectly aseptic. It is strong enough for any purpose of this sort. You can draw it with almost your entire strength without breaking it. It is prepared for use by cutting the kinked ends off with scissors, and throwing the rest into a carbolized solution—a ten or fifteen per cent. solution in warm water—and in a half hour it is ready for use. Tie two or three knots, or it may come undone, but you may cut the ends short or long as you please. Its advantages are: first, it is very smooth; you can arm the needle with it directly and it will not kink like a silver wire. Second, it has strength enough for any operation of this kind, including trachelorraphy. Third, if you render it antiseptic, my observation has been that no more suppuration will follow than follows silver wire.

In this I agree with the opinion of my friend, Dr. Sutton, who has used this suture many times more than I have, and who first advised me to employ it. Fourth, although the ligature gets soft enough in the preparation for you to tie it with ease, yet it gets no softer, although permitted to remain in the tissues three or four weeks, thus affording support as to position of tissues equal to that of silver wire. Fifth, although an animal ligature, it is not absorbed, and remains like a wire for weeks. Sixth, you can leave the cut ends in the vagina, for they will not jag the tissues, and even a No. 28 wire will jag it if the ends are cut short.

After the operation the patient must be kept in bed, and a self-retaining catheter kept in the bladder constantly for eight to ten days; until union is complete. This I regard as essential, since the distention of the bladder, which may not prevent union, will nevertheless prevent union occurring with the field of the operation in the contracted state so favorable to good results. These remarks will impress you as all the more important, if you recall my recommendation always to carry the denudation through the vaginal wall, at least near the centre.

I have operated after the manner proposed in fifty cases, and think my experience warrants the claim that it possesses the following advantages

1. Simplicity, ease of execution.

2. Less width of denudation is required at any given point in order to secure the necessary contraction after closure than in other methods.

3. The deep denudation necessary to cure in all cases can be done by this method with greater safety.

4. Since tension upon any one line of the operation after union is less than after other methods, and since the deep denudation causes firm union, the good results are likely to be more permanent.

5. After cure, the vaginal orifice and entire anterior wall of the vagina will conform more perfectly to the original.

Society Reports.

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF CINCINNATI.

The President, DR. A. J. MILES, in the Chair.

Meeting of June 11, 1885.

A MODIFIED OPERATION FOR CYSTOCELE.

Dr. Thad. A. Reamy illustrated to the Society his method of operating for cystocele. (See article on page 449.

DISCUSSION.

Dr. Kemper complimented Dr. Reamy on the ingenuity of his operation. While all the older methods of surgical cure of cystocele were faulty, having one of two defects, either in leaving a portion of the mucous membrane undenuded, or in the want of depth of the denudation, there can be no question that any method of operation which offers to womanhood a prospect of relief from so troublesome a malady is superior to the old-fashioned mode of treatment by pessaries.

Personally, the speaker would confess that pessaries had given him trouble and dissatisfaction. He hoped to see the day when this mode of treating cystocele would no longer be thought of. Nevertheless he was of the opinion that in most instances surgical interference would give at best but temporary relief, since, owing to the peculiar conformation of the anterior wall of the vagina, a permanent cure is not likely to result. In order to illustrate the remarkable resiliency of the vaginal structure he would relate the following case:

A little over eleven years ago the speaker was called to see the wife of a poor Italian. Her vagina was shortened by cicatricial bands to one-fourth the depth of the average size. He recommended an operation, but as the idea of any surgieal measures was repugnant to the patient, she refused consent. A year later, to his great surprise, he was called to attend this same patient in confinement. He at first laughed at the idea of the woman being pregnant, because he thought such an occurrence impossible. Anticipating trouble he called Drs. Foster and Carson in consultation. After diligent search they found an opening, into which, with considerable pressure, they succeeded in introducing a No. 5 English catheter. It was understood by all that delivery ultimately would have to be effected by Cæsarean section. It was determined, however, to postpone such an operation until the last moment, in the meantime endeavoring to relieve the sufferings of the patient by anointing the walls of the vagina with the simple extract of belladonna. To their great amazement the walls of the vagina expanded to such a degree that the child, which weighed seven pounds, was born through the aforesaid

narrow opening. Measures were at once adopted to keep the vagina open by introducing an ordinary glass vaginal speculum and retaining it there by tying it to the parts. This was done with ease. The cicatrix, however, again began to form, and had such strength as to bite off more than one inch and a quarter from the end of the speculum. With some difficulty the speaker succeeded, however, in finding and extricating it entire. The cicatrix then again contracted to its original narrow size.

This case proved that if the pressure be sufficient it would inevitably break down the results of even an otherwise successful operation.

Dr. Gustav Zinke said that though he had not had occasion to perform the operation, it had interested him sufficiently to devote to it some study. The question is, When is the operation necessary? and, What is the best method operating? He agreed with the previous speakers that all other methods are faulty for the reasons already given. As regards Dr. Reamy's operation, he would like to know if it was so well adapted for urethrocele as for cystocele. If it is intended for the latter only, he thought it unnecessary to branch off on each side of the cervix, as Dr. Reamy had done. All that is required is to lessen the caliber of the anterior vaginal wall. If the operation is undertaken also for the cure of urethrocele, there is some justification in thus continuing the incisions up on either side, but then, the speaker thought, it possessed no advantage over Emmet's operation. Simply as a modification of the latter operation, the speaker offered a gentle approximation of the top with the bottom of the closed horseshoe figure, instead of crowding the lower curve closely against the upper and then introducing the stitches, as shown in Emmet's book. Of all the operations for simple cystocele, however, the speaker considered Dieffenbach's method most preferable. For sutures he gave preference to wire, because gut is not so strong as the former suture.

Dr. Wenning said he had occasion to perform the operation for cystocele several times. In each instance, however, the operation was only auxiliary to posterior colporrhaphy for prolapsus of the uterus and vagina. He also agreed with the previous speakers in the objection raised to the other operations, namely, inclosure of a portion of the mucous membrane and insufficiency of the depth of denudation. The second he considered, however, not quite so objectionable as the first, provided the width of the denudation be great enough; for by folding the two halves of the denuded figure on itself a firm cicatrix may be established, which by its breadth may prevent the bladder from descending and pushing the anterior vaginal wall before it, just as we endeavor to obtain a wide union by Simon's or Hegar's method of posterior colporrhaphy. For most cases, however, the speaker preferred a large opening into the vaginal wall, the tissues being removed through its entire structure down to the posterior wall of the bladder. He performed this operation in two

instances with a good result, but the shape of the denudation was, instead of an ordinary, a *true* oval or egg-shaped figure; the larger portion of the incision being near the cervix, the smaller, or "point of the egg," near the urethra. On one occasion he had an excellent opportunity of observing the adaptability of this form of excision, when the patient, in the midst of the operation, began to retch and vomit fiercely during the administration of ether; the parts concerned in the operation were forcibly everted and the bladder forced down through the opening just made in the anterior wall of the vagina. The edges of the wound were carefully pared around the prolapsed bladder, the latter viscus pushed back in its place, and the sutures closed. The wound healed up well, and all bladder trouble, which complicated the laceration of the perineum and prolapse of the uterus and vagina, was at an end. The removal of so large a portion of vaginal tissue may seem unnecessary, but if a sound be introduced into the bladder and the anterior vaginal wall be lifted off by a pair of tenacula or tenaculum forceps, it is astonishing how much redundant tissue there will be. It may be objected that we destroy the contour of the vagina by excising a large piece, but we must remember that this wall is already greatly deformed by the constant pressure causing so enormous a distension of this tissue.

As regards Dr. Reamy's operation, the speaker hardly regarded it extensive enough for inveterate cases of cystocele, and he thought that the side prolongations were only effectual in somewhat shortening the length of the vagina. If that were intended, however, it could be more effectually done by uniting these two lines on each other, which would possess the additional advantage of preventing the uterus from falling down, since prolapsus of the uterus is the most common cause of cystocele. He also feared that the angle formed by the junction of the lines of this Y-shaped figure might not unite, just as Emmet met with this difficulty in his operation, where the lower limbs join the upper just above the urethra.

Dr. G. S. Mitchell remarked that most of the various operations will cure the majority of cases of simple cystocele, but unfortunately most women who require operative interference for this affection also suffer from other complications, as rectocele, prolapsus uteri, rupture of the perineum, etc.; consequently it is difficult to effect a cure. In order to get rid of the superabundant tissue in the vagina, the latter must not only be shortened but also abridged. The speaker is of the opinion that this indication is fully met by the last operation proposed by Emmet, namely, a a straight denudation in the median line and a semi-circular removal of tissue around the meatus urinarius. In fact Dr. Reamy's operation strikes the speaker as being Emmet's operation simply inverted; the lateral branches of the denudation, instead of passing around the meatus urinarius on either side, are carried up on both sides of the cervix. However, the speaker would admit that he had seen good results following Dr.

Reamy's operation, and he also regarded it as essential that the denudation be made deep.

Dr. Miles thought the shape and method of operation depended on the individual case. He also regarded a sufficient removal of vaginal tissue all-important. His first cases were not a complete success, owing, as he thought, to not observing this precaution. When he removed the mucous membrane entire he found he had had better success. He made use of the trowel-shaped denudation, making its position relative to the locality of the greatest redundancy of the tissue; if the redundancy be nearest the urethra he made the base at this portion with the point above, if it be desirable to remove the greatest portion in the neighborhood of the cervix he reversed the figure by having the base above and the point below. In cases of simple cystocele he had been always successful in obtaining a good result.

Dr. Reamy, in closing the discussion, said: I shall have to dismiss the question that has been raised concerning the propriety of making a perineorrhaphy or a colporrhaphy posterior, by simply calling your attention to the fact that, in the beginning of my remarks, I stated that what I should say had reference only to the operation for cystocele, without any of the complications, except prolapse of the exterior wall of the bladder, and I referred to the other complications only so far as to be understood. I have frequently made my operation, however, in connection with perineorrhaphy and posterior elytrorrhaphy. Of course, no man would make this operation alone except for pure cystocele, or cystocele with prolapse of the anterior vaginal wall, which is also cured by the operation. No treatment is complete unless you restore the vagina. It is advisable, however, when the posterior operation is to be done, and plenty of time is allotted to the operator, and where he can control the patient, to make the operation on the anterior wall first; then, as soon as the patient had recovered, and before she is out of bed, to make that on the posterior wall.

With reference to the method of Dieffenbach, for which one of the speakers has expressed preference, with Emmet's modification, if we take out sufficient tissue, in the elliptical form, it does well, provided the case is an uncomplicated one. To show that it is defective, however, we have but to consider what will be the shape of the cicatrix resulting from the removal of an elliptical portion of mucous membrane in a bad case demanding extensive denudation. Will not every one agree that it is the highest type of gynecological skill to restore deformed parts as nearly as possible to their natural condition? In Dieffenbach's operation what do you do? You draw the edges of an elliptical denudation together, and necessarily deform the vagina. The method disregards the form of the wall, and does not regard the constriction of the vagina where it goes forward to join the bladder wall. It makes a flat, straight surface. In ad-

dition to this it removes so broad a surface that to go deep is dangerous. The prime advantage of the operation proposed, on the other hand, is its simplicity, and the small amount of tissue removed. Still, if the two arms of the denudation are placed side by side, it will be seen that the amount of tissue removed is considerable. The apex of the undenuded surface between the arms is fixed to the anterior uterine wall, and the result is practically the same as if a much larger surface were denuded. No undenuded surface is covered up. The angles are so easily brought perfectly together that union readily occurs. The rule is to make the denudation wide or narrow, acccording to the degree of cystocele, and to carry the lower arm down far or only a short distance, according as urethrocele is present or absent.

In reply to the statement of a gentleman who thinks the proposed operation the same as that of a distinguished author named, except that the directions of the triangles are reversed, I remark that he is mistaken. First, the arms of the denudation are in different relations. Second, the central denudation in my operation, which runs longitudinally with the bladder, is complete—no undenuded portion—edge to edge. Finally, in this connection, it is eight years since my method was devised and done in a public hospital.

NEW YORK OBSTETRICAL SOCIETY.

Stated Meeting, January 6, 1885.

The President, Dr. Wm. M. Polk, in the Chair.

Serrated Scissors for Repairing the Cervix Uteri.

Dr. T. A. Emmet showed a pair of scissors, presented to him by Dr. Protheroe Smith, of London, one blade of which was serrated to prevent slipping from the dense tissue of the cervix. In reply to a remark by Dr. Chamberlain, he said the scissors presented to the Society by Dr. Dawson had, he believed, only one fang at the end of each blade, whereas these, being serrated the entire length of each blade, would prevent slipping before the point had yet reached the cicatrical tissue.

A Clamp For Use in Perineorraphy.

Dr. Noeggerath said that when he was in Freiburg lately he assisted at several operations by Prof Hegar. In the operation for prolapsus of the anterior wall of the vagina, it ordinarily took a very long time to denude the surfaces, and occasionally the procedure was attended with much hemorrhage. But the operation, as it was performed by Prof. Hegar, was done in a remarkably short time, as he grasped the redundant tissue between the blades of a straight clamp (exhibited by Dr. Noeggerath), passed the sutures, and then excised the tissue. Dr. Noeggerath also presented a similar instrument, the clamp being curved, which he had

devised to accomplish the same purpose, and had shown to the society about fifteen years ago. He thought the curved clamp was preferable, inasmuch as it enabled the operator to remove the greater amount of the surplus tissue. As to the results of this manner of operating, Prof. Hegar had shown him some patients upon whom the operation had been performed a number of years ago with perfect success.

Dr. J. E. Janvrin said that the clamp used by Hegar was identical with one used a number of years ago by the late Dr. Peaslee, except that Dr. Peaslee's had no handles. Dr. Janvrin had not employed it lately, but formerly he had used it with very good results.

Dr. Emmet remarked that an instrument involving the same principle was used by the late Dr Budd as many as twenty-five years ago.

Antiseptic Curette.

Dr. Noeggerath also presented a curette, the handle being a tube for the conveyance of an antiseptic fluid from a syringe or irrigator during the operation of curetting the uterine cavity. In a great many cases of curetting there was no urgent necessity for antiseptic treatment, but there were other cases in which it should not be dispensed with, those, for instance, in which there was sepsis two or three weeks after miscarriage, parametric or perimetric inflammation, or mucous fibroids in which the curette was employed to remove the hypertrophic condition of the mucous membrane. He had recently employed the curette, with a stream of bichloride of mercury solution running through it into the uterine cavity, in a case of extreme sepsis after miscarriage, and the temperature fell immediately afterwards.

Tubes for Intra-uterine Injections.

Dr. Noeggerath also presented a tube for injecting water into the uterus after confinement, invented by a physician of Cologne, the peculiarity of the instrument being that it caused the stream to flatten and enter the uterus less forcibly, thus diminishing the danger of the injection entering the uterine sinuses, and also that of causing severe chills an hour or more after the operation.

Dr. H. T. Hanks also presented a tube for making intra-uterine injections. Being made of silver, it could be bent at any desired angle, and admitted of thorough cleansing, either with boiling water or some antiseptic solution. The bulb contained two apertures of exit for the fluid, and was fastened to the tube by a screw.

Dr. W. M. Chamberlain remarked that the late Dr. Nott's instrument was a very good one for making intra-uterine injections. He thought the antiseptic curette presented by Dr. Noeggerath was open to the objection that, the curve being short and thick, it would be difficult to reach some portions of the uterine surface with the scraping edge.

Dr. Noeggerath said that in presenting the instrument he had not meant to say its shape was perfect, but simply desired to illustrate a principle.

With regard to injecting-tubes, he had long since abandoned the use of metallic instruments within a few days after confinement, because they were liable to cause a lesion of the newly formed mucous membrane, and thus give access to septic material. He had employed a rubber tube with a canal on its outer surface which allowed the water to run off freely.

Laparotomy for Fibroid Tumor of Uterus.

Dr. B. F. Dawson presented a large fibroid tumor of the uterus with the following history: The patient, 47 years of age, regular in menstruation, first noticed enlargement of the abdomen about four years ago. She was seen by several physicians, one of whom told her that the abdominal enlargement was due to an ovarian tumor, and another that it was due to a tumor of the uterus. The swelling having considerably increased, two years ago she consulted Dr. Phelps, of Bellows Falls, who advised her to await events. About a year ago the abdominal enlargement had become so great that Dr. Phelps, assisted by Dr. Campbell, performed tapping, and withdrew fluid which had the appearance of urine. Nine months later the tapping was repeated, when the fluid was less clear. At three subsequent tappings the fluid had gradually assumed a milky appearance. It was two days since Dr. Dawson first saw the patient and removed the tumor. She was then decidedly cyanotic, so great was the abdominal distention, and he was unable to make a positive diagnosis before withdrawing the fluid. Vaginal examination only revealed mobility of the cervical portion of the uterus. Seven gallons of fluid were withdrawn, which had a thick, whitish appearance, but no odor. The finger was introduced through a small abdominal opening, and a tumor, attached to the uterus, and filling the entire lower pelvic cavity, was appreciated. In removing it the fundus of the uterus had to be excised, including the ovaries and tubes. The stump was fixed in the abdominal wound by his clamp. He had just been informed that evening by telegraph that the patient's temperature was 105·5° Fahr., her respiration 32, and her pulse 120.

Tubal Gestation. Expulsion of Fetus and Membranes Through the Uterus.

Dr. Janvrin presented a specimen with the following history: A fetus, apparently of only two months development, had been expelled four months after conception, the woman having been exposed to pregnancy only on the 17th of August last. About the 15th of September there was a slight "show" lasting for two days. It returned again on the 21st, lasting one day, and again on the 27th, lasting one or two days. Dr. Janvrin saw her on the 3d of October, when there was a very slight flow. On examination, the uterus was found to be a little enlarged, particularly toward the left horn, the os was slightly patulous, and considerable tender-

ness existed over the left horn and tube. He advised rest, and decided to watch the case closely and await developments. He saw the patient five days later, and daily from that time until the 14th of October. There was a more marked flow; the symptoms of pregnancy were present, nausea, changes in the appearance of the breasts, etc. He saw the patient again on the 29th of October, and became convinced from a thorough examination that the fetus lay partially in the left Fallopian tube, as the tube was enlarged. The enlargement was symmetrical, being as great at the junction with the uterus as at any other point. He felt convinced, however, that the mass projected considerably into the uterine cavity, and he used considerable force in pressing upon the fetus, trying to expel it into the uterus, but failed. The gravity of the case was explained to the patient and her husband, the opinion that electricity would probably have to be used was expressed, and a consultation was suggested. Dr. Thomas saw the patient with him at noon on the following day. During the night the patient had had severe pains, like those of labor, confined to the left side of the uterus and to the tube, and at the same time there was a slight flow. The pains ceased early in the morning. Dr. Thomas examined the patient, and on retiring to another room, expressed himself as decidedly of the opinion that there had not been tubal pregnancy; that the fetus was probably entirely in the cavity of the womb, situated pretty well up in the left horn. Dr. Janvrin then examined the patient and found that the mass had nearly disappeared from the tube, but was convinced that it still projected somewhat into the tube, perhaps about one fourth of its length. At all of his previous examinations the right horn of the uterus was much flattened, but within the last twenty-four hours the right side had become bulging, almost as much so as the left horn. He felt so positive in his diagnosis that he was now of the opinion that the fetus had become sufficiently detached to cause complete miscarriage in a short time. But the mass remained in the uterus, the organ did not enlarge, and the soreness and tenderness diminished to a certain degree, but did not entirely disappear. After about six weeks the patient began to have some flow, which when Dr. Janvrin was called three or four days later, had become quite marked. Believing that the fetus was dead he expected expulsion to take place soon, and advised the patient to keep quiet. Notwithstanding absolute rest, the fetus and membranes were expelled the following day, December 15, four months after conception, having the appearance of only two months development. The placenta was atrophied except at one point, as large as the thumb nail, where it was fresh and had carried sufficient blood to prevent decomposition, but not to sustain life.

Dr. T. A. Emmet thought there must be a certain number of cases of tubal pregnancy involving the horn of the uterus in which it would be possible to dilate the horn with an instrument similar to Barnes's uterine

dilator, which he once exhibited to the Society. He did not know, however, what amount of danger there might be of causing rupture of the walls. In reply to a question he said that in Dr. McBurney's case the placenta and fetus could be distinctly recognized within the tube through the rectum.

The President remarked that Dr. Janvrin's case was interesting as going to dispel doubt on the question whether the fetus could be expelled from the tube into the uterus. When he once reported a case, one gentleman took the ground that it was impossible for the fetus to pass from the tube down into the uterus, for two reasons, the first being absence of expulsive power in the tube, and the second that before the descent into the uterus could take place, the tube would be ruptured.

Dr. Emmet, remarked that Parry reported a case in which a child at full term was forced from the tube out through the uterus. He added that the muscular structure of the tubes certainly did become thicker during pregnancy.

An Operation for Fistula in Ano.

Dr. T. A. Emmet referred to the difficulty experienced at times from leakage, after the usual operation of division of the sphincter for fistula in ano, and said that to avoid this accident he adopted another procedure about five weeks ago. The internal fistulous opening was about half or three quarters of an inch above the sphincter, the external one about an inch to the left of the anus. He placed the woman in Sim's posture, introduced a rectal speculum, and divided the tissue with the scissors as far up as possible without involving the sphincter. Then Dr. Bache Emmet who was assisting him, put one finger into the rectum, bringing the rectal surface under the cut, and enabling him to denude the entire tract of the sinus without enlarging the opening into the gut. While the parts were held in this position he inserted the first suture into the integument, close to the sphincture, outside, passing it through the lower edge of the internal opening of the fistula, and he so continued to pass interrupted sutures until the wound was closed. To make the result more certain he then introduced three interrupted sutures of catgut, approximating the mucous surfaces within the rectum more closely. He thought the operation might have been more easily performed had he inserted sutures in the walls of the fistula outwardly before using the scissors; as it was, he experienced great difficulty in passing the sutures so deep. The result had been perfect. Such an operation would prove a great benefit if we could thereby cure the disease and avoid dividing the sphincter muscle.

Partial Removal of the Uterus.

Dr. Emmet also related a case seen in consultation with Dr. T. H. Burchard. He first saw the patient, a woman 68 years of age, in good general health, about November 20, 1884, when there was a condition of the cervical canal suggestive of malignant disease—probably commenc-

ing epithelioma. A surgeon who had seen the patient had expressed the opinion that the disease was limited in extent. Dr. Emmet advised an early operation, which was performed about the 24th of November, Dr. Burchard and his assistant and Dr. Harrison being present. Dr. Emmet's intention was to attempt to remove the diseased tissue by excising a V-shaped piece, but while he was proceeding with the operation, making a moderate degree of traction upon the uterus with the tenaculum, a rent took place, extending from one broad ligament to the other, and making a large opening in Douglas's *cul-de-sac*. It was then found that the entire posterior wall of the uterus had become involved in the disease. He now made the incision through the back of the uterus, a little below the insertion of the tube, and forward nearly on a line with the dip of the peritoneum. When the upper part of the cavity of the womb was opened an ounce or more of pent up pus escaped. Having reached healthy uterine tissues, he afterward removed a portion of the vaginal tissue in Douglas's *cul-de sac*, and then carefully brought together the peritoneal surfaces from one broad ligament to the other with silver sutures. The mucous membrane of the vagina was attached between the existing sutures in the peritoneum, and he also united the mucous membrane of the vagina to that of the uterus, forming a series of radiating folds. At the close of the operation the fundus of the uterus, which was not more than an inch in depth, covered the roof of the vagina like the lid of a pot. To the surprise of all, the temperature rose only half a degree after the operation. It seemed very certain that, had the operation not been performed, peritonitis would have developed within two or three weeks.

Dr. T. H. Burchard (present by invitation) remarked that Dr. Delafield had examined the tissue and pronouced the disease epitheliomatous cancer.

Dr. Noeggerath thought the disadvantages of the ordinary operation for fistula in ano, as pointed out by Dr. Emmet, must have been recognized by every one. An English surgeon, whose name he could not recall, had performed an operation nearly similar to the one described, during which he curetted the fistulous tract and then sewed it up. The results had been the same as in Dr. Emmet's case.

Dr. W. R. Gillette thought the operation referred to by Dr. Noeggerath had first been performed by Dr. Jenks, of Detroit.

Dr. Camberlain said he performed the operation described by Dr. Neoggerath last May, not knowing that it had been done before. The opening was well out on the buttock, and, after forcible dilatation, it seemed that the sinus would be long in filling up if the ordinary operation were performed. He therefore curetted the fistulous tract, removing the pyogenic membrane, and united the edges with sutures passed by a highly curved needle. Union took place by first intention, and retention had been

complete since the temporary parlysis from dilatation had passed away.

Dr. Emmet had performed the operation attributed to Dr. Jenks three years ago.

THE BRITISH GYNÆCOLOGICAL SOCIETY.

Meeting of June 10, 1885.

The President, ALFRED MEADOWS, M.D., F.R.C.P., in the Chair.

CYSTIC DISEASE OF THE OVARY.

Dr. R. T. Smith showed a large cystic ovarian tumor, which he had removed after death from a patient upon whom he was about to operate. She died from an apoplectic seizure.

NEW NEEDLE-HOLDER.

Dr. Edis showed a needle-holder, which possessed some advantages over Hagedorn's needle-holder. The needle was designed by Mr. A. E. Nevins, of the Middlesex Hospital.

SHORTENING THE ROUND LIGAMENTS.

Dr. Alexander (Liverpool) read a paper on the operation of correcting some uterine displacements by shortening the round ligaments. He said the operation had now been performed in nearly all the prominent cities in the world, and by most operators with more uniform success than generally befel any new operation. He never found any difficulty in finding and drawing out the ligaments. An incision was to be made upwards and outwards from the pubic spine, in the direction of the inguinal canal, for one and a half to two or three inches, according to the fatness of the subject. A considerable thickness of subcutaneous fat was then met with, which must be cut through by subsequent incisions, until the pearly glistening tendon of the external oblique muscle was reached. Midway through the fatty tissue an aponeurosis sometimes appeared, so firm and smooth, that it might cause the operator to think he was deep enough, but he would find no ligaments at this spot. The first stage of the operation consisted simply in cutting down upon the tendon of the external oblique muscle, until it appeared clean and shining at the bottom of the wound. The external ring was then found. The finger passed to the bottom of the wound detected the spine and the ring outside. Having isolated the external wound, and tied any little vessels, the next step was to find the end of the ligament. By everting all the structures upwards, the round ligament could be seen, generally at the lowest part, and with the white easily distinguished genital branch of the genito-crural nerve along its anterior surface and close to it. The ligament at this stage was more or less rounded in shape. It was an easily recognized flesh-colored structure. When the ligament was identified, the small nerve on its surface was to be cut through without dividing any of the ligament. Then gentle traction was to be made, either by the

fingers or by broad blunt-pointed forceps. Bands holding it to neighboring structures were cut through with scissors. As soon as it began to peel out, it was left, and the opposite side begun. The final stage of the operation consisted in placing the uterus in position by the sound, and pulling out the ligaments until they were felt to control that position. A curved threaded needle, with fine catgut, was used to stitch each ligament to both pillars of the ring, and the external abdominal ring was closed without strangulating the ligament as it lay between it. The ends of the ligaments were now cut off, and the remainder stitched into the wound by means of the sutures that close the incision. A fine drainage-tube was inserted, and the wound washed out with carbolic or other lotion before these sutures were tied.

The after-treatment consisted in rest. The tubes were removed on the second day, when the wound was dressed. The mortality of the operation might be set down as none. Three deaths had occurred, but they were due to preventable causes. As mortality did not seriously enter into any consideration of the results of this operation, the real question at issue was whether it fulfilled the intentions of the operator and satisfied the expectation of the patient. The operation was designed to correct certain uterine displacements, and these alone. Whether the discomfort of the patient would be thereby relieved, entirely depended on whether or not the symptoms were due to the displacement. To secure success, the operation must be properly performed, and the after-treatment must be rational, so that no strain might be placed on the ligaments until sound union had taken place.

Dr. Meadows wished to know for what purpose Dr. Alexander resorted to the use of the galvanic stem pessary in the after-treatment of these cases. In his experience the galvanic stems were so unsatisfactory that he had abondoned their use. Could not an ordinary stem be used?

Dr. Protheroe Smith referred to a case in which Dr. Alexander had operated on a patient for this acute retroflexion.

Mr. Reeves said the difficulty of the operation depended to a great extent upon the thickness of the abdominal walls. In thin subjects the operation was easy.

Dr. Heywood Smith had performed the operation with satisfactory results, and considered it a valuable addition to our therapeutical resources.

Mr. Lawson Tait had done only one of Dr. Alexander's operations. The woman was nine weeks recovering. The uterus was perfectly restored to its position. The wound suppurated, and the patient nearly died. He did not, therefore, feel very enthusiastic about the operation.

Dr. Alexander said he used the galvanic stem merely for mechanical purposes; any stem would do. Shortening the round ligaments did not seem to interfere in any way with pregnancy. He had operated in one case where the patient became pregnant, and had a child without any trouble.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, Thursday, September 4, 1885.

The President, B. F. Baer, M.D., in the Chair.

Dr. B. F. Baer read the following report of a case of

Ovarian Cystoma Complicated with Peritonitis and Phlegmasia Alba Dolens.—Double Ovariotomy.

Mrs. M., æt. 31, has been a widow nine years. She had one child ten years ago and had enjoyed good health until about three years before I saw her. At that time she observed that her abdomen was increasing in size. This gradually progressed for eighteen months, when she was large enough to attract the attention of her neighbors. After this the growth remained almost stationary and did not affect her general health until the latter part of March of the present year, when she was suddenly seized with pain in the left iliac region. The pain was acute and radiating in character, extending principally down the anterior portion of the left thigh. She attributed the attack to an unsual exertion. Although she made an effort to continue her avocation, that of seamstress, she was compelled to give up and send for her physician, my friend, Dr. John R. Haney, of Camden. When Dr. Haney first saw her, her abdomen was very tender over its entire surface, purple from congestion, greatly distended and tympanitic in its upper but dull in its lower portion. She was suffering great pain and had constant nausea and vomiting, her skin was hot, pulse 120, and temperature 103°. From the history, symptoms and physical signs elicited, the doctor diagnosticated ovarian cystoma with supervening peritonitis. He administered quinia per rectum and morphia hypodermatically, together with counter irritation over the abdomen. Within a week the patient appeared to be better, when, through the kindness of Dr. Haney, I first saw her. The tympanites had disappeared and the pain was not so severe, but the abdomen was still very tender on pressure, especially in the left iliac and umbilical regions, her features were drawn and flushed and presented an anxious expression; her tongue was dry and heavily coated, pulse quick and temperature 102°. She lay quietly in the dorsal position with her thighs flexed. The abdomen was as large as at full term of gestation, and was projecting. It was dull on percussion everywhere, except along the line of the colon and in the epigastrium, and there was evident fluctuation. The uterus was retroverted, not freely mobile and very tender on pressure on the left side. Above and upon it could be felt the lower border of the circumscribed growth, which occupied the abdominal cavity. I fully agreed with Dr. Haney's diagnosis of ovarian cyst complicated by peritonitis. As she seemed to be somewhat better, I advised a continuance of the treatment as previously pursued, with the hope of obviating during the unfavorable condition in which she then was. The peritonitis continued to improve slowly, but a new trouble presented itself in a very painful swelling of the

left lower extremity. This continued until the limb was greatly increased in size. Its temperature was much higher than that of its fellow which seemed to be in a normal condition. She now required large doses of morphia to relieve her pain and she was losing flesh and strength. She still had nausea and took almost no nourishment. Her temperature and pulse had again risen to the highest point noted. Both she and her friends were willing and anxious that we should do something more radical than simply to wait for a more favorable condition for operating if we deemed it proper. I believed from the symptoms and physical signs that the inflammatory action was external to the cyst and not within it, and for that reason decided to wait for a subsidence of the acute symptoms which I rather confidently expected. At the same time I held myself in readiness to operate at once should the patient not improve or become worse. The next day she showed signs of slight improvement. Treatment both local and general continued. The acute symptoms gradually subsided to those of a subacute condition. The temperature had decreased to 101°, pulse 100 but weak. She was still unable to retain food and was extremely weak. I advised further delay. But she did not improve much after this, her temperature and pulse remaining about the same as that noted above. Her stomach had regained its power to a slight degree to retain and digest liquid food. She had now been confined to her bed more than two months, her left leg was powerless. There had not been the slightest improvement during the two previous weeks. We therefore decided to remove the tumor.

Operation.—June 19, 1885, assisted by Drs. J. R. Haney, W. A. Davis and H. M. Christian, and in the presence of a section of the class from the Polyclinic, I made an incision three inches in length down to the peritoneum and found, as I had expected, that it was closely united to the cyst wall. These adhesions of cyst to peritoneum were universal and it required careful and patient manipulation to separate them. The parts were exceedingly vascular and hemorrhage was profuse. After separating it as far as possible, I tapped the cyst and allowed the contents, which were semi-liquid and chocolate colored, to drain away. I next closed the puncture made by the trocar, and then completed the separation of the cyst from its adhesions and removed it. As there was a very general and free oozing of blood from the broken vessels, I introduced a number of large flat sponges and spread them over the bleeding surface. An assistant now made firm pressure upon the external surface of the abdominal walls whilst I ligated the pedicle and removed the tumor. The cyst developed in the left ovary and the pedicle was slender, not unusually vascular and of good length. The right ovary was diseased, contained a number of small cysts and was double the normal size. I removed it also. Examination now showed that the hemorrhage had almost ceased, but there were still a number of points from which

blood flowed. The peritoneum was intensely injected and I disliked very much to pick up bleeding points for fear of making the hemorrhage worse. I therefore reapplied a large flat sponge and had firm pressure again made from without whilst I proceeded to place the sutures for the closure of the incision. I then removed the sponge and found very little blood upon it. I replaced it by a long narrow strip of sponge, which I allowed to project from the lower angle of the wound and then again cleansed Douglass' cul-de-sac and other dependant portions of the peritoneal cavity, after which I quickly tied the sutures from above downwards, removing the long sponge through the lower angle of the wound before I had encroached so closely upon it as to compress it in its removal. It was only slightly stained. I quickly applied the external dressing making an unusual amount of pressure by cotton and bandage. The operation was finished, but the patient bore it badly. Her extremities were cold and purple, her face livid and pulse very weak. Stimulants hypodermically and the application of external heat, which were begun during the operation, were continued after she returned to bed. She remained in an almost collapsed state for many hours, but gradually reacted and the next morning was in a fair condition. Her temperature was lower than it had been for weeks, pulse 112 but weak, stomach quiet, no pain, no tympany. She had taken an occasional small piece of ice, but nothing else except the morphia since the operation.

June 21. Temperature 102°, pulse 120. Slight pain and tenderness in left iliac region, she had been very weak and faint during the night, for which brandy had been administered in repeated small doses. The swelling and pain in the limb had diminished. She had not vomited once since the operation and felt hungry. Ordered a teaspoonful of milk every second hour.

June 22. Comfortable and doing well. Temperature 99·4°, pulse 90 and strong, slight metrostaxis, passed flatus per rectum. Milk increased to a tablespoonful and retained.

June 24. Temperature 99, pulse 85. General condition greatly improved, no pain, no tympany, examined wound and found it united throughout, removed sutures.

June 25. Doing well and is bright and cheerful. She took nearly a quart of milk during the last twenty-four hours and digested it.

June 30. She has been gradually improving. Temperature normal, pulse 95, bowels moved to-day. She is taking solid food and expresses herself as feeling quite well. Limb improving. She can now move it.

July 12. Sat up to-day for the first time, the twenty-second after the operation.

August 30. A note received from Dr. Haney to-day informs me that Mrs. M. is going about attending to some of her duties, but that she has not yet regained her strength fully and that her limb is still weak.

The recovery of this woman under the forlorn circumstances just narrated is certainly a great triumph for our art; but the case serves a better purpose in forcibly illustrating the danger of deferring operative interference in ovarian cystoma simply because the patient is comfortable and suffering no inconvenience from the presence of the tumor. The subject of an ovarian tumor is in constant danger of injury from slight causes which may produce such changes in the tumor as to render what might have been a simple and safe operation, one of extreme hazard. This had been a simple, slow growing cyst, and had not markedly affected the health during its three years of existence; yet it suddenly became inflamed and the patient narrowly escaped death as a result. The case furnishes a strong argument in favor of operation as soon as the disease is diagnosticated. Of course there are qualifications and each case must be decided on its own merits; but the rule that an ovarian tumor should be removed as soon as it is known to exist is the only safe one to follow.

As a striking contrast to the case just related and to show the value of the principle enunciated, I will report the following case of

Polycystic Ovarian Tumor.—Double Ovariotomy.

A. R., was sent to me August 5, 1885. She was nineteen years of age, single. Puberty was established at sixteen and she had menstruated regularly until six months previously. She then, without cause, so far as she knew, began to flow more freely at her periods and they continued longer. About the same time she noticed a small lump in the right iliac region. This increased in size so that the entire hypogastrium was distended, and when I first saw her she was as large as at the eighth month of gestation. Her face showed marked signs of emaciation and pallor and the drawn, anxious expression of ovarian cystic disease. She was then having a profuse menorrhagia every two weeks. She had not suffered any pain and up to within a few weeks very little inconvenience, except from the frequent metrorrhagia.

During the last month, however, her health had been failing. She had lost flesh, had a weak, languid feeling and suffered much from the weight of the growth. Physical examination in the dorsal position revealed a projecting slightly irregular abdomen, larger on the right side, dull on percussion over the entire anterior surface, but resonant along the line of the colon. Palpation showed imperfect fluctuation, and several firm, irregular masses within the abdominal cavity. The vagina was virginal, the cervix uteri pointing forwards, the body of the uterus retroverted, the whole organ enlarged and soft. It was only slightly moveable independently of the tumor. The sound gave a measurement of three inches.

I diagnosticated polycystic disease of the right ovary, and advised immediate operation. Six days afterwards, on August 11, she entered my private hospital, and on the the 13th I operated with the assistance of Drs. H. M. Christian and J. N. Richards. I made an incision two and

a half inches in length, and came upon the surface of the tumor, which presented the white, glistening nacreous appearance especially common to thick-walled polycysts.

Tapped with Hodge's trocar. The contents were so thick that they flowed very slowly, and it was necessary to puncture several smaller cysts, which was done without removing the instrument. Even then the mass did not collapse much, because of the young or child-cysts. After closing the puncture I enlarged the incision to three inches, but had considerable difficulty in removing the tumor. It was necessary to make firm traction with rotatory movements, whilst Dr. Christian exerted a counter-force and pressure through the abdominal walls. Fully ten minutes were occupied in delivering the tumor after it was tapped, but I was rewarded with an incision that looked so small, that it seemed almost incredible that this large mass had passed through it. There had not been a single adhesion, but the pedicle was short, thick, and vascular. I tied it with Tait's Staffordshire knot, cut the tumor away and dropped the stump. The tissues of the left ovary were found to be entirely disorganized, and degenerated into a cyst as large as a walnut. This I also removed. The uterus presented a very vascular appearance and was somewhat enlarged. After assuring myself that the peritoneal cavity was entirely free from any foreign matter, I closed the incision, dressed the wound, and returned the patient to bed. Temp. normal, pulse 96. No pain; but as she felt a little sore and restless, one fourth of a grain of morphia was given hypodermically; small pieces of ice for thirst. 14th, 8 a.m., temp. 99°, pulse 84; had passed a good night. At 1 p.m., 26 hours after the operation, milk in teaspoonful doses was allowed, water when she desired it. 15th; metrostaxis began this morning. 18th; union complete; removed sutures. Her recovery was uninterrupted. She sat up for a few minutes on the 11th day, and went home eight miles in a carriage, on the 18th day after the operation. She sent a request to-day to be permitted to go out, because she is feeling so well. Certainly nothing could have been gained by procrastination in this case.

Dr. Goodell congratulated Dr. Baer on the good results obtained in such a serious case as that first reported. Great care in the asepsis of these cases should be observed. In one of his cases of septicemia before the operation, after complete union had been secured the stiches had been removed, and after the patient was up an abscess was observed forming in the line of union, and was very persistent. Finally, after careful search, a ligature which had been tied around the pedicle of one of the ovarian cysts was found and removed. Subsequently the other appeared, and after its removal the abscess healed.

He did not like to remove the stitches so early as Dr. Baer removed them, and he reminded Dr. Baer of a case in which he had assisted Dr. Goodell. The operation was performed on December 5. Convalescence

was rapid, and the patient was so impatient to be home on Christmas that she could not be restrained, and on the 19th day after the operation she took the cars for home. The train was derailed, and the jolting caused the cicatrix to open. The physician who was called in closed it immediately, and the patient recovered. In another case a cough caused the wound to burst open and reveal the bowels after the stiches had been removed. This patient also recovered. For these reasons he never removed the stitches before the eighth day, and not until the bowels had been opened.

Dr. Goodell inquired of Dr. Baer his method of closing the opening in the cyst after it had been tapped preparatory to its removal from the abdominal cavity. Does he employ pressure-forceps? What method of dressing the abdomininal wound?

Dr. Baer closes the cyst-puncture with Wells's clamp-forceps when the cyst-wall is strong enough. In some cases he stiches up the opening, or ties a string below it when the cyst-walls are loose and soft. He closes the external wound, as he had been taught by Dr. Goodell, with silk sutures, and dresses it with salicylated or absorbent cotton, adhesive strips to hold the cotton in place and take the strain from off the stitches, and over all a bandage. He removes the sutures on the fourth or fifth day in order to avoid the danger of pus forming in the suture tracks, as has sometimes occurred when he has allowed them to remain as long as eight days.

Dr. Goodell exhibited his improved

Uterine Dilator.

He said the main difficulty in the operation for the rapid dilatation of the cervical canal lay in the liability of the blades of the instrument to slip out. This he had in a great measure overcome by having shallow grooves cut into them. Into these grooves the tissues sank, and the resulting friction kept the instrument in place.

Since he had called the attention of the Society to his instrument not quite a year ago, he had performed the operation forty-one times for dysmenorrhea and sterility, making in all two hundred and nine such cases. In not a single instance had dangerous symptoms followed, and the average of success was a very large one. He had become firmly convinced that for dysmenorrhea and sterility the operation of rapid dilatation of the cervical canal, would, except in very rare cases of stenosis of the os externum, wholly supersede the cutting operation, the use of tents, or the slow dilatation by any means whatever. For by the former not only was the measure of success far greater, but the danger from inflammation was very much less. He dilated the parts from three quarters of an inch to one inch and a quarter as measured off by the register in the handles watching the cervix carefully to see what strain it could bear. His instrument could he opened to the width of one and a half inches, but he re

sorted to that extreme divergence only when wishing to introduce his finger for diagnostic purposes. This he could not ordinarily do unless the parts were relaxed by hemorrhage. Usually, however, when suspecting the existence of a polypus, he did not find it needful to pass in his finger, for after a moderate dilatation he introduced a fenestrated forceps and opened it at haphazard. In this manner he has repeatedly caught and twisted off a polypus without knowing it was present. The subsequent removal of the growth through the os uteri being the most difficult part of the operarion.

Dr. Baer was strongly impressed by the case of a lady whom he had delivered to-day, as to the advisability of entirely giving up division of the cervix. A year and a half ago he had slit up the cervix posteriorly, and to-day he felt very anxious during the first stage of labor as to the probability of laceration of the uterus, starting from the point of the former operation. The anterior lip was very long, coming down under the pubis, and the posterior lip could not be felt. The case will be reported fully.

When the uterus contains a polypus the continued hemorrhages reduce the contractility and a single dilatation will sometimes enlarge the os sufficiently to admit the finger or forceps, but, if the uterus is healthy it contracts immediately after the with-drawal of the dilator. He could not recall an instance of inflammation following rapid dilatation. Sterility of long standing is seldom cured by dilatation or any other means.

Dr. C. M. Wilson had seen recently in the practice of Dr. Ellwood Wilson, a uterus, the cervix of which had been divided bilaterally some years ago. The operation had resulted in the development of the symptoms peculiar to a laceration of the cervix, with ectropion. Trachelorraphy was performed by Dr. Agnew with complete relief to the patient. Dr. Wilson mentioned this case to call attention to the change in opinion and practice since Emmet proposed his operation.

Dr. Longaker inquired as to the prevention of slipping of the dilator and called attention to the original method of pressure over the fundus of the uterus.

Dr. J. G. Allen has performed rapid dilation over seventy-five times and has never seen any bad results from the operation. The blades of his instrument diverge as they separate and there is then no disposition to slip out. The blades are more curved than in Dr. Goodell's instrument; he thinks that an advantage in holding the instrument in place; the handles are turned up so as not to touch the bed or table.

Dr. Goodell prefers the slight curve, so that in flexion of the uterus he can introduce the dilator with its curve reversed to the bend in the womb and by opening the dilator in that position rectify the flexion of the organ. He prefers paralellism of the blades because the stenosis of the cervix is greatest at the external os, and there is no need for dilata-

tion above the internal os. He considers it dangerous to press the fundus of the uterus down while using the dilator, for fear of wounding the tissues, and he uses a strong tenaculum to hold the organ, but since he had got Mr. Gemrig to roughen the blades by grooves he had not been annoyed by the slipping of the instrument. He rarely finds it necessary to separate the blades more than one inch, but he sometimes does so to the extent of one and a half inches, especially when he wishes to introduce his finger into the uterine cavity.

Dr. Goodell exhibited two specimens of

PAROVARIAN CYST.

In each case the cyst was so detached from the ovary that the former could have been easily taken away without injury to the ovary. He was greatly tempted to practice conservative surgery in these cases, and leave the ovaries untouched, but on account of apparently incipient cystic degeneration they also were included in the ligature and removed. Both these cases were operated on in his private hospital and both had recovered.

In his experience the removal of parovarian or of broad ligament cysts was one of the most successful of operations. Out of a large number which he had performed he could recall but a single fatal case, and in that the result seemed hardly due to the operation. The lady lived in a distant city, and he did not see her after the operation, which was a very easy one. At the end of a week the bowels were moved, and the stitches were removed, and everything gave promise of an unusually prompt convalescence. On the twelfth day she was seized with uncontrollable vomiting, and she died on the seventeenth day. Six months previously she had had an analogous attack of vomiting from which she barely escaped with her life. Thus far this year he had had eighteen ovariotomies, and this was the only fatal case among them.

DISCUSSION.

Dr. Montgomery wished to ascertain the opinion of the Society as to the advisability of removing the second ovary when in an operation for the removal of an ovarian cyst the other ovary was found to be slightly diseased. In his first ovariotomy, performed in 1879, the second ovary was found to contain numerous small cysts; it was not removed, and the patient has since been twice pregnant, and there has been no appearance of another tumor nor any symptoms referable to the remaining ovary. If the climacteric has been passed there would be no question about it.

Dr. Baer inquired if tapping ever cured parovarian cysts. It was formerly reported as a means of cure. Do they always return after tapping? Would Dr. Goodell recommend tapping in undoubted parovarian cyst? He himself felt strongly inclined toward abdominal section in all cases. He thinks the second ovary should be removed when it is not healthy, as the idea of a second operation is very depressing to a patient.

Dr. Montgomery knew of one instance of a parovarian cyst which had been tapped and had refilled seven times. It was finally removed by peeling out the cyst, as on opening the abdomen he found the tumor universally adherent. Only one ligature was required, viz.: on the stump of an enlarged ovary which bulged prominently into the cyst cavity.

Dr. J. G. Allen considered that as an ovary somewhat diseased may give rise to a pregnancy, it should be left. We know too little about the development of such small cysts into large ones. Until we have certain data on the subject it must be considered as a case of want of information and knowledge.

Dr. Parish was in accord with Dr. Allen as to the want of knowledge. He has seen diseased ovaries containing numerous small cysts in many autopsies, and there had been no symptom during life to excite a suspicion of their existence. The existence of minute cysts can not be considered as proving any liability to the production of large ones. If the second ovary contained a cyst as large as a partridge's egg, he would remove it, but if numerous cysts as small as split peas were present, he would not. The possibility of conception should be considered as well as that of a cyst.

Dr. Goodell acknowledged the truth of the points made by Drs. Allen and Parish, and he believed that he had repeatedly removed the second ovary unnecessarily. Yet the history of his own ovariotomies shows a return of the disease in the remaining ovary in about two per cent, and he thought he erred on the safe and right side. The social conditions of the patient would always have a great weight with him. If an heir were wanted or the patient were young, he would leave a suspicious looking ovary, or try to remove the diseased portion of it. But in the majority of his cases, where there was any doubt he removed the ovary. Of course under such a rule he must remove ovaries which might never give rise to any trouble in the future. But the mental agony of women when informed that the operation must be performed a second time upon them, and on the other hand the great joy and satisfaction of patients when assured after the close of an operation that both ovaries had been removed, have determined him that, other things being equal, it is better to remove the second ovary.

As to the cure of parovarian cysts by tapping, his own experience is not sufficient to decide absolutely. He would advise the radical operation, but if the patient, after understanding the liability of return, wished it, he would tap, as there was but little danger from tapping such cysts. A patient was tapped by Dr. Atlee twenty years ago; five years afterward the cyst filled and was tapped by Dr. Goodell. It then partly refilled, and so remained for a long while; the fluid was then gradually absorbed and never returned. He had beside this one two cases which he tapped, one five years ago and the other three years ago, and there has been no

return whatever of the fluid. On the other hand he has had two or three cases in which the cyst burst spontaneously several times, and yet refilled invariably. The rupture was followed immediately by some collapse and pain, and later on with excessive secretion of urine, with complete subsidence of the tumor. He had also heard of several cases of rupture, but as far as he has learned the history of such cases, the cyst has always returned. The reports of the cure of ovarian cysts by tapping and the injection of the tincture of iodine must be true only of parovarian cysts.

Dr. Harris knew of a case of parovarian cyst in which fourteen years had elapsed between the tapping and the subsequent refilling.

Dr. E. E. Montgomery read the following *supplement* to his paper on

Bromide of Ethyl.

I read a paper on bromide of ethyl as an anæsthetic in labor before the April meeting of this Society. Although I did not attempt a history of the early administration of this drug, subsequent investigation has shown that I did Dr. L. Turnbull injustice in not mentioning that to him we are indebted for the revival of this agent and its first use in this country. In following the German literature, by which I was led to use this drug in labor, I ascribed its first obstetrical use to Lobert of Paris. The first case in which he used it was for the application of forceps, and occurred in March, '81, but a paper published by Dr. Turnbull (*Med. Bulletin*, June, 1880) shows that he had then used it in a second case of labor, and spoke in high terms of its peculiar advantages. Dr. H. Augustus Wilson had used it in labor prior to August 7, 1880, when he published an article upon this drug (*Med. and Surg. Reporter*, Aug. 7, 1880). It becomes quite evident that the first obstetrical trial of this agent was made in this city, and the priority lies between the gentlemen named. Various mixtures of the ethyl have been advocated in labor and minor surgical operations. Booth, of Ohio (*Ther. Gaz.*, 1884–85, p. 159), recommends alcohol, two part, chloroform and bromide of ethyl each one part. W. A. Byrd, Quincy, Ill. (*Ther. Gaz.*, March, '84), has used bromide of ethyl one part, chloroform three parts, alcohol four parts, in some ninety-eight cases without a single unpleasant symptom. It has not everywhere received the same condemnation that is shown by the hesitancy to use it in this city. In spite of the bad name given it by two deaths under its use, and the apparently dangerous symptoms induced by experiments upon the lower animals, its use has been revived by Chisholme (*Maryland Med. Jour.*, 1882–3, IX, 388) and Prince (*St. Louis Med. and Surg. Jour.*, 1883, XIV., 297) who strongly urge its use in minor operations and preliminary to the administration of ether. The last named has reported five hundred cases in which it was used without a single unpleasant symptom.

A leading article in the *Ther. Gazette*, June, 1885, advocates a redistillation of a mixture of bromide of ethyl and olive oil as a valuable and

safe anæsthetic in labor. These facts are referred to simply to induce the profession to give this anæsthetic a fair trial in ameliorating the terrible suffering of natural labor.

Dr. Montgomery exhibited a

UTERINE FIBROID POLYPUS.

Miss R., æt. 38 years, began to menstruate at 17 years. The flow was regular, quite free, lasting a week, and was attended with pain the first three days. Ten years ago she had a hemorrhage, and subsequently several such attacks. Two years ago she had a severe hemorrhage followed by a bloody discharge continuing several months, since which time she has never been regular. The flow would occur too frequently, be very profuse, and attended with pain and loss of flesh. The symptoms were more marked during the last year.

At one of the hospital clinics some years ago the difficulty was ascribed to acute version of the womb. Dr. Bournouville examined her three weeks ago, diagnosticated the condition fibro polypus, and referred the case to me for treatment.

She was quite pale, lips bloodlesss, complained of pelvic pain and of a constant bloody discharge which amounted to hemorrhage upon the slightest exertion. The vagina was dilated by a tumor the size of an orange, about whose pedicle could be felt the neck of the uterus. The finger passed into the os and about the tumor without difficulty. Every examination was followed by severe hemorrhage. The pedicle was cut through by means of the wire ecraseur, and the tumor removed by means of a pair of polypus forceps.

Considerable hemorrhage followed its removal. As this was not controlled by the application of hot water, a tampon saturated with a solution of subsulphate of iron was introduced. This was renewed on the second day. On the fourth her temperature ran up to 103°, she had a chill and pain in various parts of her body. These symptoms vanished under the use of quinine, digitalis and opium.

Five weeks after the operation she appeared much improved, has had no bleeding since, and appetite and strength are greatly increased, the uterus was normal in size, the cervix still dilated, and will admit the finger with pressure, the cervical membrane was in good condition.

The tumor was the size of an orange, the mucous membrane of the lower surface was ulcerated, so that vessels were ruptured, allowing hemorrhage on any exertion.

The case is of interest from the long continuance of the hemorrhage, and illustrates the importance of early and careful examination of the cavity of the uterus in cases of protracted hemorrhage.

DISCUSSION.

Dr. Goodell seldom uses the wire now for the removal of uterine polypi. He prefers traction with twisting, or enucleation by the finger. There is

less bleeding, and he is afraid of "cupping" of the fundus uteri and its injury by being included in the wire loop. He had made traction with the obstetric forceps and enucleated tumors so large as to rupture the perineum, even after lateral incisions had been made in the labia. He has partially inverted the womb, enucleated the tumor and then restored the organ to its proper form. The tumor sometimes occludes the os, and fetid pus arising from necrosis of the growth is imprisoned above it, giving rise to a suspicion of cancer.

Dr. Baer thinks Munsel's solution may have caused the high temperature, vinegar would have been a better hemostatic, and it is also an antiseptic. From the appearance of the specimen a portion of the adventitious growth seems to have been left behind, and it would be interesting to know the history of the stump.

Dr. Parish has removed many fibroids of different sizes, and sometimes with degenerated tissues and noisesome odors. The rapid recovery of Dr. Montgomery's patient was remarkable. It is much to be regretted when any portion of the tumor is left, as necrotic change is rapid and decided in such tissue, and there is danger of blood-poisoning. The pedicle, however, generally shrinks and disappears.

Dr. Goodell remarked that this tumor appeared to be sessile and had been wholly removed. The pedicle proper is usually simply mucous membrane without adventitious tissue, and it makes very little difference if some of it is left behind, as it shrivels up and is absorbed.

Dr. Allan sometimes regretted that he was compelled to leave a portion of tumor or pedicle in the uterus, but he has never seen any bad consequences follow it. He prefers vinegar to iron as a hemostatic, and considers it as good an antiseptic as carbolic acid.

Dr. Montgomery remarked that the wire evidently brought away all the tumor. There was no evidence of any remnant on examination to-day. In one case a portion of tumor or pedicle was unavoidably left, and he removed it some time afterward by means of a tenaculum. He wounded his finger in doing so, and suffered from septicæmia. The woman had an attack of cellulitis.

Abstracts and Selections.

I. — OBSTETRIC.

Severe Vomiting in Pregnancy: Miscarriage: Death, with Remarks. — (By P. Horocks, M.D., Assistant Obstetric Physician to Guy's Hospital in the *British Medical Journal.*)

M. L., aged 39, came to Guy's Hospital amongst my outpatients last July, complaining that she had been vomiting incessantly for three weeks. She considered herself two months pregnant. On examination I found

the uterus about the size of a two months' gestation. There was no malposition, and, with the speculum, no erosion. She appeared very anemic, and in answer to inquiry, said she was always more or less pale, but that she had become more so during the last few weeks, owing, she thought, to the vomiting, which prevented her from keeping any food down at all, so that she was practically starving. After treating her in vain for a fortnight, I took her into the the hospital, and by rest in bed, with very careful dieting, and the trial of various drugs, of which tincture of iodine in minim doses appeared to be of much service, she got so much better that she went out apparently cured on September 20, having been in the hospital five weeks, and being now between three and four months pregnant.

Whilst in the hospital it was found that she had a mitral systolic bruit, probably dating from an attack of rheumatic fever twenty years ago. There was no albumen in the urine.

About a week after leaving the hospital, her legs began to swell, and her urine escaped whenever she coughed, but she was not sick except early in the morning.

Her husband came to the hospital early in November to say that she was much worse. I gave an order for her admission, but for some days she was too ill to be brought. She was admitted on the second occasion Nov. 12, under my colleague, Dr. Galabin, who has kindly allowed me to make use of the case. Sickness was not now an prominent symptom, but she had great dyspnœa, and œdema of the lower extremities. Urine was of specific gravity 1010. It contained no albumen. Urine passed involuntarily.

On the 15th she was very sick all day. On the 17th, she was suddenly delivered of a child, which breathed a few minutes and then expired. It appeared to be about equal to a six month's fetus. She seemed better for a few hours, when she became unconscious, dying the next day without regaining consciousness. At the *post mortem* examination the uterus was not found to be displaced. There was no erosion of the cervix. It was enlarged, corresponding with the recent deliverery, but nothing abnormal could be discovered about it. The liver was extensively diseased by a primary encephaloid carcinoma, the parts not infiltrated by cancer being fatty. The heart was large, and the mitral valve had old fibrinous deposits on it. The kidneys were healthy.

Remarks.—The recent discussion on this very interesting question at the Obstetrical Society drew forth so much, and the time was so limited, that no opportunity was given to myself, amongst others, of making any remarks. Had there been more time, I intended to mention the above case, which seems to me well worth recording.

It may be that the cancer of the liver had nothing to do with the severe vomiting in this case; but, had there been no pregnancy, I do not

think anyone would have thought there was anything strange in this symptom, with such a lesion, whilst the vomiting itself was so severe as to be, at all events, very unusual from pregnancy only.

The liver-disease is interesting, also, in its bearing upon the reference made by Dr. Matthews Duncan to the researches of Hecker into the question of degeneration of the liver in pregnancy. Dr. Matthews Duncan drew attention to the difference between the sickness of pregnancy and the sickness in pregnancy, the former being that due to the pregnancy, and the latter being due to some other cause acting accidentally during the pregnant condition. Obviously these two forms of vomiting are quite distinct; and, in discussing the question scientifically, it is necessary to bear them well in mind, and so avoid all kinds of complications and differences of opinion which arise inevitably when one speaker is talking of one thing and another of another thing.

But whilst this distinction is clear logically, it is by no means easy to be always certain with which form we are dealing, when a patient, who is pregnant, is attacked with severe vomiting; and I notice that Dr. Graily Hewitt's paper "Severe Vomiting in Pregnancy," and not of pregnancy. Now, if a case occur with severe vomiting in pregnancy, *plus* some disease which in itself is capable of producing severe vomiting, who can say that the vomiting is due to either the one or the other? Cases are on record where vomiting has not stopped, even after the induction of labor, and yet it is said that the vomiting was due to the pregnancy. Might there not have been some other cause in those cases?

When there is some obvious and well marked malposition of the uterus, and the replacement into its normal position is followed by the cessation of vomiting, it is tempting to say that the malposition had caused the vomiting. But it is quite certain that there are cases of severe vomiting in pregnancy without any malposition, and without any other ascertainable cause for the vomiting than the pregnancy either *ante* or *post mortem* and which would therefore come under Dr. Matthews Duncan's "of pregnancy." But where there has been no *post mortem* examination in a fatal case of vomiting, I do not think one is entitled to say that the pregnancy caused the fatal vomiting. It may have been the cause and the only cause, or it may have been an aggravation of some other cause, or it may have had nothing to do with it.

That pregnancy is a cause of vomiting is so well recognized, that vomiting is considered a symptom of pregnancy. At the same time, no one has ever yet proved in what way the vomiting is brought about.

It is easy to say it is a reflex action due to stretching of the uterine walls, no one has got beyond the conception of the hypothesis. But, supposing for a moment that this is the correct interpretation of the ordinary vomiting of pregnancy, we are still a long way off the solution of the question, what causes the severe vomiting in pregnancy. For, first

of all, we must assume that the vomiting is due to the pregnancy, and not to some other unrecognized condition; in other words, that it is severe vomiting of pregnancy; and then we have got to show what particular part of the reflex loop is at fault. We see the motor end, that is, the vomiting apparatus, its excessive and dangerous action; and the question is, why does this occur.

One might resolve the numerous theories that could be brought forward into three kinds.

1. "Alteration in the stimuli;" by which is meant increase in degree or kind of that condition of the uterus, stretching of its fibres, or whatever it is, which causes the ordinary vomiting of pregnancy; and this increase may be brought about in numerous ways, including malpositions of the uterus.

2. "Increased irritability of the afferent nerves or reflex centres, or efferent nerves, which form the reflex loop between the uterus and the muscles engaged in vomiting." If it could be shown by microscopic examinations that, in these cases of severe vomiting, the spinal grey matter between the entrance of the afferent (uterine?) nerves, and the exit of the efferent nerves for vomiting (gastric, œsophageal, phrenic, pneumogastric, intercostal, etc.) was in a state of increased irritability, either from disease in itself or in neighboring parts, it would not only help to explain these cases, but would in itself support the reflex hypothesis of the ordinary vomiting of pregnancy. But, so far as I know, no observations have been made in reference to the condition of the spinal cord in the severe cases of vomiting; so that we do not know, either negatively or positively, the condition of the so-called superficial and deep reflexes during life, nor of the normal or abnormal histological appearance of the spinal cord after death.

3. "Increased irritability of the muscles themselves, which produce vomiting." I have often heard Dr. Wilks say that excessive action of an organ is not generally due to disease of that organ; for instance, severe palpitation is not due to heart disease, and severe vomiting is generally performed by a healthy stomach. Hence one does not expect to find a diseased stomach in these cases. At the same time the muscular fibers in the stomach, without being diseased, might be more irritable from some cause or other, such as irritable ingredients in the blood, or pathological conditions of neighboring parts; for example, hepatic disease.

All these theories on theories require supporting by many facts and observations before they can be accepted as satisfactory.

Dr. Graily Hewitt has brought forward several facts in support of his view that malposition of the uterus is a cause of severe vomiting in pregnancy; but many cases are on record, among which I would place my own, in which no malposition existed. Hence it follows that the severe vomiting in pregnancy may be due to different causes.

In women vomiting is set going more easily than in men; and any cause which would produce sickness in a non-pregnant state would act more potentially, if anything, if pregnancy existed. Hence the possible causes of severe vomiting *in* pregnancy are as varied as the causes of severe vomiting in a non-pregnant state.

Of the causes of severe vomiting *of* pregnancy we know very little at present; but one thing seems to me quite clear, and that is, that the excessive sickness is not always due to the same cause; and, even if it be accepted that malposition of the uterus will sometimes produce the symptom, it will be found that cases occur where this can not be the explanation.

Labor Mistaken for a "Bilious Attack."—R. E. Burges, M.D., writes as follows to the *British Medical Journal*:

I wish to bring under notice the following case. A few days ago I got an urgent message to go and visit Mrs. G., a young woman, married about eleven months. On arrival at the house, I was informed by the husband that his wife was suffering from a bilious attack, "Just exactly the same as the one you attended me for." On going upstairs, I found her mother and mother-in-law there, both confident that it was "only a bad bilious attack," and another woman who asserted that it was a case of labor. I was asked by the patient herself to "give her something to relieve her quickly of this awful pain."

On making inquiries, I was told that she had menstruated quite regularly. On placing my hand on the abdomen, I felt what appeared to me to be an enlarged uterus. Her mother asserted most positively that the young woman had menstruated only the week before. On making a vaginal examination, I found a fetal head presenting low down, almost pressing on the perineum. Her friends were greatly surprised when I told them what was the matter, and had to send to a married sister for some clothes to put on the child. In about half an hour after my arrival, she was delivered of a female infant, which appeared to me to be about a seven months' fetus. The child is now alive and well.

Forceps to the After-coming Head.—Credè (*Archiv für Gynäkologie*). The use of forceps to the after-coming head, by Smellie, was undisputed until the middle of the present century. Then Kiwisch and Veit advocated respectively the Prague and Smellie-Veit methods of manual extraction. The forceps were also condemned by Scanzoni and Schroeder, and more recently by Zweifel and Schauta, so that it has now sunk somewhat into the background.

The Prague and Smellie-Veit methods are not without their dangers. With the former we may get tearing of the spinal column, and even complete detachment of the head; and injuries to the floor or angles of the

mouth, and dislocation or fracture of the lower jaw, may occur in the latter method. These dangers do not attend the use of forceps.

Credé's observations widely differ from those of Schroeder. He gives an abstract of sixteen cases from the Leipsic Clinic in which the forceps were used after various methods of manual extraction had been tried in vain.

Of the sixteen mothers, eight had a normal pelvis, eight a contracted pelvis. One of the latter died from hemorrhage occurring on the sixth day *post partum*. Of the sixteen children four died. In three out of the four cases in which the child was still-born there was contracted pelvis (twice prolapsus funis, difficult version, and flat pelvis; once of rigidity soft parts and flat pelvis). In the fourth case there was rigidity of the soft parts and a normal pelvis.

In easy cases the manual methods are sufficient. In very severe cases perforation is necessary, but in a large number of cases which lie between these extremes the forceps should be used if attempts at manual extraction fail within a reasonable time. Twelve children in the cases cited were thus delivered alive; and, as regards the risks to the mother, Credé's statistics tend to show that these are slight. From eight to ten minutes is the time generally recognized as the limit within which the arms and after-coming head must be relieved if the child is to live. If these be not extracted by manipulation within five minutes, then the probability of doing so within the next few minutes is small, and the forceps should be applied without longer delay. In this way many children may be saved, provided they have not been destroyed by previous attempts at manual extraction, and that complications, such as prolapse of the cord, very large head, etc., do not exist.—*Manchester Medical Chronicle.*

Some Practical Points with Regard to the Membranes in the Third Stage of Labor.—Dr. A. H. F. Barbour's (*Edinburgh Medical Journal*) practical remarks are based on the following anatomical facts: Before labor has commenced the relations of the membranes to the uterine cavity are as follows: Next to the uterine wall is the decidua, consisting of the vera and reflexa, which are practically one membrane. The decidua appears to be made up of two zones—a superficial compact and a deeper spongy zone. Resting on it is the chorion, composed of compressed fibrillated tissue, beneath which is a more cellular layer. On its inner surface, and united to it by a delicate layer of connective tissue, is the amnion, which is composed of a layer of columnar epithelial cells. This is the thinnest, strongest, and most elastic of the three layers. The chorion is thicker, but not so strong, while the decidua is the weakest, although thicker than the other two. The chorion is intimately united to the decidua, but the thin layer of connective tissue which unites the former to the amnion forms a weak zone in the cohesion of the membranes. The connection

between the decidua and the uterine wall is similar to that which exists between the muscular wall of the uterus and its mucous membrane in the unimpregnated state. After the membranes have been ruptured, the decidua and chorion are thrown "into a series of more or less wavy folds," owing to the contraction of the muscular wall of the uterus and its consequent thickening. The "crests of the waves" indicate the points of detachment from the uterus. The amnion, owing to its elasticity, is thrown into similar smaller folds. The placenta remains yet attached to the uterus.

Keeping these anatomical details in mind, three points bearing on the treatment of the third stage of labor are referred to, viz., with regard to (1) the retention of portions of membranes in this stage; (2) the mode of delivery of the membranes and (3) the cause of hemorrhage in partial placenta prævia.

As regards the first, the importance of examining the membranes, as well as the placenta, is insisted on. Most practitioners are careful to see that the whole of the placenta has been delivered, not only on account of the risk of hemorrhage, but also owing to the danger of septicæmia, arising from a small portion of placenta being retained. But the danger of endometritis being caused by the retention of a portion of the membranes, has not yet been fully recognized. In examining the membranes the point at which they have been ruptured should be taken notice of, and also whether the chorion and amnion have been ruptured at the same point. By examining carefully round the seat of rupture in the amnion, a deficiency in the chorion can easily be seen, when the two membranes have been delivered together. The chorion should then be traced over the whole of the amnion, and notice should be taken if the decidua is of uniform thickness throughout. The writer does not advise us to introduce the hand into the uterus whenever we find that the membranes are deficient, but he argues that by making this routine examination more care will be taken in their delivery, and that a more certain prognosis can be given as to the return of the interior of the uterus to a healthy condition.

With regard to the second practical point, the writer advises that the placenta should not be expressed until half an hour after the delivery of the child. This is of importance, as by so doing no time is given for the gradual separation of the membranes. The practice of twisting them into the form of a rope is recommended, provided that the fingers are kept within the vagina, so as to detect any tearing of them outside of the cervix. If tearing occurs, two or three fingers should be insinuated into the uterus, and the membranes gently detached with the finger-nail.

Schroeder explains that the cause of hemorrhage in partial placenta prævia is due to the placenta being "kept taut, as it were, on the unruptured bag of the amnion." As the uterine wall retracts off the ovum, the

placental site becomes bare and hemorrhage occurs. When the membranes are ruptured, however, the placenta retracts along with the uterine wall, and thus hemorrhage is prevented. Dr. Barbour doubts this statement, because (1) "the chorion is a delicate membrane and tears readily; and (2) the connection between the amnion and chorion is of such a slight nature that the difference in their elasticity is sufficient to separate them." In a recent case of delayed rupture of the membranes, where the bag came outside of the vulva, he divided the amniotic sac carefully and slipped it over the shoulders and body of the child. He then found that the chorion did not follow the amniotic sac as it moved downward, but became separated from it, and formed a cap over the lower pole or the ovum. Dr. Barbour adopts the view of Matthews Duncan, who attributes the separation of the placenta in placenta prævia to "the change in shape of the lower uterine segment."—*Manchester Medical Chronicle.*

The Treatment of Placenta Prævia.—J. Braxton Hicks, M.D., F.R.C.P.Lond., writes as follows in the *Medical Press :*

The treatment of placenta prævia is always a subject that it is well from time to time to discuss, in order to review the various plans suggested for its treatment under the light of increasing experience. It is very gratifying to me to find Dr. James Murphy in his very practical paper on the subject in your issue of September 2d, so fully alluding to the plan I have suggested, and bringing such a list of powerful advocates in its favor; it is also very gratifying to find that the author he so fully quotes—Lomer—is repeating almost word for word the remarks I have made in my little work on "Combined External and Internal Version," 1864, p. 26, on the adaptability of this method to the treatment of placenta prævia. But I am not intending now to discuss the whole question; my chief object in now writing is to note the following remark by Dr. Jas. Murphy: "As the bipolar method, for some reason or other, has never been taken to kindly in England, the country of its invention. It seems to have been performed by Hamilton in 1822, by Lee in 1843, but was first brought prominently before the profession by Braxton Hicks."

In justice to myself I am anxious to point out that neither Robert Lee nor Dr. Hamilton, nor anyone in England ever employed both the external and internal hands together in either partial or complete version. What Robert Lee did was in cases of arm presentation in premature delivery, work on the fetus by the axilla till the leg presented. What Hamilton says he had done was to bring the head down in arm presentation, but the external hand was not used by either gentlemen as an active agent in turning. The only operator I have heard of, who used both hands—one outside and the other inside, both concerned actively in the manipulation—was Dr. Wright of Cincinnati, but only in arm pre-

sentations, where he, by the outer hand, thus assisted the inner hand to bring the head to present, or to produce cephalic version. This he did some few years before I published my cases, though I was not aware of it till many years after I published the work above quoted. I may, in passing, remark that the method I suggest is different from Dr. Wright's, using the external hand also to the head. But no one before myself had described the plan of complete podalic version, so that without entering the uterus, save by one or two fingers, we could almost always bring the foot to present instead of the head. Others in Germany had manipulated the uterus by both hands outside before labor to correct supposed malpresentation, but this is very different from the very practical security, that in the presence of labor, induced or natural, we can rely with almost complete certainty on making the opposite pole of the child to present. There are many reasons why it has not been quite so much used in England as abroad, but it is much more so than Dr. Murphy thinks. The old proverb about a prophet in his own country fairly explains in part; the conservative habit of mind of another part. Then in Germany obstetrics are taught, in England learnt. The exhibition of the operations done before a class is much more impressive, than read in the study, or not vigorously enforced in the lecture room. Again, I have not "stumped" the country with repetitions of cases, not because I had no confidence in the usefulness of the plan, but in the assurance that without such aid it would work its way, and thus its proper position would be better assured. But I may mention that my little work was very early translated into German by Professor Gusserow. It was very early employed in Russia, and is extensively used there. I am sorry to find that though Dr. Murphy has used the "combined external and internal version" later in the case, he has not employed it in placenta prævia at the first, for I think he will find it more sure in restraining hemorrhage than other measures, less disturbing to the patient, and more independent of machinery. Some day he may be called to a case where the os is small and rigid; the hemorrhage continuing, or, as in some cases after separating the placenta, urgent; when he may have no Barnes' bags, no professional help, no forceps near. It may be then that he may try, and I feel sure will be pleased with the adoption of the plan I have suggested.

I cannot end without congratulating Dr. Murphy on his successful treatment of these troublesome and dangerous cases; nor without expressing my adhesion to much which he has said in his paper. His excellent results I think are largely owing to his adoption of the resolution to terminate pregnancy as soon as might be possible when it is known to be complicated with placenta prævia; this cannot be too strongly urged, and this I have for the past twenty years, both in class and private, insisted on, namely, that where the fetus is viable and placenta prævia known to exist, arrangements should be made to induce premature

labor, beginning dilatation with Barnes' bags. It may be necessary to induce labor *before* viability; but *after* the risk of fatal bleeding is too great to give away the perfect command of the situation we hold in hand.

A New Explanation of the Process of Menstruation. — Lœwenthal (*Archiv für Gyn.*, Band xxiv, Heft ii., 1884), in this exhaustive article, gives a new theory of menstruation which shows marked originality and research. It would be impossible in the short limits of this report, to give an abstract of the elaborate train of reasoning by which he arrives at the results. They are summed up briefly at the end, and we would refer those interested in the subject to the article itself for the minuter details. He makes the following propositions:

I. The periodical of flow blood from the female genitals is not a consequence of the rupture of a follicle (which usually occurs at the same time), but of the degeneration of the uterine mucous membrane which has become hypertrophied before such rupture, and independently of it.

II. This growth, the menstrual decidua, is caused by the imbedding in the unimpregnated condition of the last ovum furnished by the ovaries.

III. If this imbedded ovum is impregnated, the menstrual decidua becomes that of pregnancy, but if the ovum remains unimpregnated, it degenerates as a consequence of the death of said ovum.

IV. Taking each menstruation for itself, the rupture of the follicle and the flow of blood stand in no other causal relation to each other than that possibly the causes and conditions which are operative at the occurrence of the hemorrhage may, at the same time have an effect in bringing about the rupture of the ripened follicle.

V. The coincidence of the rupture of a follicle and the flow of blood is, therefore, no necessary one. Each can occur separately; a follicle can rupture without there being any menstrual decidua present, and this secondary consequence of the ovum which has previously made its appearance, namely, the menstrual flow, can occur without a new follicle rupturing at the same time.

VI. The periodicity of menstruation is determined by the extra-follicular length of life of the imbedded and unimpregnated ovum; the variations from the general or individual periodicity depend upon the shortening or absence of such capacity for life, either idiopathic or the result of intercurrent influences.

VII. The ovum which has been expelled, usually at the last menstruation, and is present ordinarily in the uterus (in abnormal cases elsewhere), is the one which is impregnated.

From these the following practical conclusions can be drawn:

VIII. Since the menstrual flow is neither a physiological function nor the necessary accompaniment of such a function, but the direct conse-

quence strengthened by innumerable repetitions of a process which is the result of our social condition, namely, the impregnation and death of the human ovum, therefore it has all the properties and results of other hemorrhages, which are always pathological.

IX. It increases and diminishes under like conditions with them.

X. The flow of blood which is the necessary accompaniment of the menstrual decidua, is only to be regarded as harmless when it occurs per diapedesin. When per rhexin it is under all circumstances unnecessary, and becomes injurious when it is felt and responded to by the entire organism as a loss.

XI. The amount of the injury corresponds to the proportion between the amount of blood lost, and the quantity (plus the quality) which the body contains at the time.

XII. Under these circumstances the indication is for the greatest possible reduction in the amount of the menstrual flow, as in any other loss of blood.

XIII. The means to be recommended are first and foremost rest in bed and hot water injections.

XIV. On the contrary, the voluntary cessation of the menses (idiopathic amenorrhœa) is under no circumstances to be regarded and treated as a disease; it is only a sign that a function (ovulation) which is not necessary to the life of the individual, from some cause or other (youth, age, pregnancy, lactation, debility) was not performed at the proper time, that is, about four weeks previously.

XV. Supported by this theory and the observation of Lawson Tait as to the importance of the tubes for menstruation, it would be desirable to attempt to substitute for castration, salpingotomy (partial resection of both tubes after previous ligation), in those cases where uterine dysmenorrhœa, menorrhagia, fibroids, and such uterine affections call for the anticipation of the menopause.

XVI. Should it appear impossible after beginning the operation for castration in the above mentioned conditions, to completely remove the ovaries, salpingotomy would be directly indicated. — *Boston Med. and Surg. Journal*

II. — GYNECIC.

A Case of Hysterectomy for Uterine Myoma.—The following was read in the section of Obstetric Medicine at the annual meeting of the British Medical Association in Cardiff, by William Walter, M.A., M.D., from notes by Dr. Donald, and published in the *British Medical Journal.*

On May 19th, 1885, E. P., aged 40, unmarried, by occupation a weaver, was admitted into St. Mary's Hospital, Manchester, on account of a myoma of the uterus growing from the fundus, and reaching upwards an inch and a half above the umbilicus.

The patient had never been pregnant, and ususally enjoyed fair health. At 16 the catamenia commenced, and menstruation continued to be regular and free from pain until six years ago; since then, she had frequently suffered from dysmenorrhœa and menorrhagia.

The tumor was not perceived by the patient until 12 months before her admission into the hospital, during which time it had steadily increased in size. Six months later she began to suffer almost constantly from pain in her back and both iliac regions, of a dragging character, which repeatedly hindered her from following her employment. She had, moreover, lost flesh, and had become very haggard and careworn in appearance.

A physical examination revealed the presence of a hard, smooth, and somewhat globular tumor, growing from the fundus uteri, reaching to an inch and a half above the umbilicus, and fairly movable in the abdomen. Examination by the vagina showed that the hymen was unruptured, that the cervix uteri was high in the vagina, and pointing backwards, and that the cavity of the uterus measured three inches.

As the patient was entirely dependent upon her own exertions for a livlihood, I determined to perform an exploratory operation, with the object of removing the uterine appendages or the tumor in question.

The operation was performed on June 10th, chloroform being the anæsthetic used. An incision was made in the middle line, three inches in length; and, finding that the attachment of the tumor to the fundus was not a very wide one, I at once prolonged the incision upwards, a little above the umbilicus. Several adhesions were then found between the great omentum and the upper portion of the tumor; some of these contained large tortuous vessels, and were ligatured with carbolised silk before they were divided.

The tumor was now drawn out of the abdomen through the abdominal wound; and, Lawson Tait's clamp being applied below both ovaries to the body of the uterus, the tumor was removed with a scalpel about half an inch above the wire of the clamp, and was found to weigh afterwards 5½ pounds. The abdominal cavity being cleared from all oozing, a glass drainage-tube was inserted into Douglas's pouch, the edges of the wound were brought together with carbolised silk sutures. On the completion of the operation, the patient seemed somewhat faint, but a hypodermic injection of ether quickly restored her. The dressing applied to the wound were corrosive sublimate gauze and wood-wool pads.

During the first twenty-four hours after the operation, nearly one ounce and a half of blood was sucked through the drainage-tube, and the patient required several doses of morphia to lull the pain referred to the lower part of the wound.

On the second day, her temperature reached 102°. Three doses of ten grains of antipyrine were administered every three hours, and the temperature fell too 99.4°, rising the day following to 101°.

On the third day, the fluid sucked through the drainage-tube was not so red in color, but contained some pus; and the day following the fluid was quite purulent, but entirely free from odor. The amount of fluid now removed from the tube was 4 drachms twice a day, therefore it was thought advisable not to withdraw the tube. The pedicle every day dusted with iodoform.

On the seventh day, the fluid drawn from the tube was still half an ounce twice a day, but now it had assumed an offensive odor; there was also a good deal of tympanites, and much pain and soreness of the abdominal wall through the pressure exercised there by the clamp, which was causing ulceration of the skin, notwithstanding every care that was exercised daily in dressing the wound to draw a thin pad of gauze under the ends of the clamp. Her temperature now ranged between 99° and 101°, and her pulse rose to 136. Her condition, in fact, was very serious, and I felt that at all hazards I must dispense with the clamp.

The patient was placed under chloroform, and I separated, with my finger, the adhesions that had formed between the pedicle and the lower angle of the wound, sufficiently to allow my transfixing the stump with a strong needle mounted on a handle and threaded with a double silk ligature; the stump was ligatured, and its surface, as soon as the clamp was removed, was touched over with the thermo-cautery; the stump then sank about three-quarters of an inch from the level of the wound, and, in case of secondary hemorrhage occurring, I allowed the ends of the ligature to remain uncut for a few days.

The relief to the patient's suffering by the removal of the clamp was most decided, and within two days her general condition had also improved, the pulse falling from 134 to 108, and the temperature from 102.4° to 100.6°.

It is unnecessary for me to enter into all the details of the after-progress of this case, but to one or two points I must briefly refer.

On the seventeenth day there was still issuing from the tube as much as five drachms of pus a day, having a very fetid odor, and on that day a fæcel smell, whilst around the tube and apparently from the inferior edge of the pedicle was issuing a fecal discharge. The tube was now removed.

On the day following (eighteenth), the portion of the stump ligatured sloughed away, and the parts quickly assumed a much more healthy appearance. The fecal discharge, however, continued more or less for twelve days, and then stopped, the wound discharging only a little pus, and the cavity caused by the sinking of the stump lessening every day. The patient daily improved in appearance, but eight days later, that is on July 17th, a small quantity of fecal discharge again came through the lower angle of the wound; but she was able to leave her bed and lie upon a sofa, and is now almost quite convalescent.

The president, in inviting discussion, expressed his own opinion that, in cases in which no other treatment availed, and in which the woman's life was threatened, it was obviously correct to remove the appendages.

Dr. Playfair (London) said that every one would fully acknowledge the great value of Mr. Tait's paper. It was impossible not to recognize the enthusiam with which he worked at this subject, and the value of the results he had to show. He would venture to suggest, however, that Mr. Tait had first made his enemy, and constructed his opposition, which he had demolished with such knock down blows. So far as he knew, all advanced gynecologists fully recognised the importance of this operation in all suitable cases of bleeding myomata, and were grateful to Mr. Tait for the work he had done with regard to it. He rather thought that Mr. Tait had confounded the opposition made by many to his views on the removal of the appendages in other cases, such as in certain chronic forms of ovarian or other disease, with a supposed opposition to this. His own experience was strongly in its favor. Of course, his personal experience was small but the results in the few cases he had operated on were all that could be desired. He should like, however, to have some information from Mr. Tait as to what were the precise indications for it, and what he would call prostration sufficient for it. That was really what was wanted. If the tumor were not producing bleeding, and the patient were strong and well, he could not see how the patient should be subjected to such risk, especially as in the larger tumors there would be a chance of having to remove all the tumor. One of his nurses, who worked hard, had had such a tumor, reaching to the ensiform cartilages; he removed it all. Mr. Tait, however, must not be surprised that he met with opposition. It was the case with all who introduced new things in practice; and on the whole it was good, as it kept down excess, and threshed out the subject. He had himself experienced this in other subjects, and it was inevitable.

Dr. Imlach (Liverpool) remarked that, meanwhile at least, hysterectomy was a more dangerous operation than that of removal of the uterine appendages, which, therefore, should be preferred. If operation for bleeding fibro-myoma were too long delayed, the safer operation was sometimes impossible. He had removed the uterine appendages twenty times for uterine tumor, and all the cases had made a good recovery. It was important to distinguish between cure of the menorrhagia and diminution in the bulk of the tumor. In all but one of his cases, the menopause had been immediately induced, but the volume of the tumor only diminished slowly. Where the bulk of the tumor caused paralysis, intestinal obstruction, etc., hysterectomy was the better operation, as removal of the appendages would fail to relieve these symptoms for an indefinite period. Often, where there is pain as well as menorrhagia, with an intrapelvic uterine tumor, hydrosalpinx, pyosalpinx, or even

hæmatosalpinx would be found; in such cases, removal of the uterine appendages had a very satisfactory result.

Dr. M. Cameron (Glasgow) said that he had under his notice the case of a young German lady, which illustrated the good result following the modern treatment of uterine myoma. This patient suffered from severe flooding due to the presence of a myoma in the posterior wall of the uterus. Considering that an operation was needful, she consulted a surgeon noted for his success in abdominal surgery. He recommended removal, but afterwards, when the patient was in his ward, changed his mind, and dismissed the case as one unsuitable for operation. The patient was very much distressed over her condition, thinking her case was one beyond relief. Feeling the necessity of some operation, Dr. Cameron urged the patient to consult Dr. Keith. On examination, Dr. Keith agreed as to the immediate necessity of operation, and would not allow the patient to return to Glasgow. He found that the tumor could not be removed without danger to her life, and, therefore, removed the uterine appendages. Some months after, on examination, Dr. Cameron found that the tumor had diminished much in size, but now the hypertrophied posterior lip became greatly enlarged; but a simple operation removed this condition. The patient was now well.

Dr. Edis (London) remarked that there could hardly be a better comment upon Mr. Lawson Tait's able paper, and the method of treatment therein advocated, than the specimen of myoma which Dr. Walter had exhibited. Mr. Tait's statistics of the operation for removal of the uterine appendages showed that the risks were extremely slight, and the advantages gained very considerable. In a large majority of the cases, the myoma ceased growing, and the hemorrhage was checked; whereas the mortality in those cases where hysterectomy was performed, even in the most skilled hands, was very large, and appalled any but the most experienced operators undertaking the management of such cases. Dr. Edis hoped the day would soon come when such specimens of large uterine myoma would be so rare as to be real curiosities. They should never be allowed to grow to such dimensions; provided, of course, that the symptoms to which they gave rise were such as to justify interference. The whole art of the medical profession was now directed to the prevention of disease, whether in the form of epidemics or of local conditions; and the sooner the fact was recognized that the growth of these uterine myoma could be cut short by such a comparatively simple operation, the better for all concerned. It was not correct to state that none of these patients suffering from myoma died from hemorrhage. They did; and, as to waiting for the menopause, this was a myth. Dr. Edis had seen numerous cases where hemorrhage continued long after the age of 50, the patient having been advised by others to wait for the climacteric.

Cocaine in the Treatment of Vaginismus.—Iwow ("Russkaja Medicina;" "Deutsch Med. Zeit.") reports a case of a woman thirty-two years old who had been married ten years, and had suffered with vaginismus all that time in spite of every kind of treatment. She was of slender build, very anæmic, and easily thrown into nervous excitement. The external genitals were normal as well as the uterus. The vagina was short. Only remnants were found of the hymen. A five per cent. vaseline ointment of cocaine was ordered to be rubbed upon the vulva before each coitus. This was late in February, and in April it could easily be ascertained that she was pregnant. In May indisposition to coitus supervened, but it yielded to tincture of damiana leaves (twenty drops every two hours). The author attributes the cure of the vaginismus not to the action of the cocaine alone, but in great measure to the moral effect of his positive assurance that it would do away with the pain.—*N. Y. Med. Jour.*

Phosphide of Zinc in Dysmenorrhœa and Sterility. — In Matthew Duncan's lectures on *Sterility in Women*, he places dysmenorrhœa in the list of the best demonstrated sources of or attendants on such conditions. But even if we consider dysmenorrhœa the cause of the sterility, the treatment of the menstrual difficulty does not in many cases admit of ready answer. Certainly there are cases of dysmenorrhœa which may be rapidly and satisfactorily treated by dilating the cervical canal, this dilatation being by double bladed dilators rather than by other means. But there remains a large number of cases that present no indication for this method of treatment, and which of course are not benefitted if it be tried. Now some of these may possibly be cured by the use of phosphide of zinc, as recommended by Decoux in a recent number of the *Gazette des Hopitaux.* Having found this medicine useful in many cases of dysmenorrhœa and of amenorrhœa, Decoux narrates a case where it twice proved effective in curing sterility associated with the former disorder.

In addition to the success of this medicine in dysmenorrhœa, amenorrhœa and sterility, he has found it remarkably useful in cases of hysteria, ataxia, anæmia, and neuralgia. He gives two granules of four milligrames each, morning and evening. Only the crystallized preparation should be used as the powder is inert. He states that its preparation is so difficult that with a single exception one scarcely finds in commerce any but an impure preparation which is partly or completely ineffective.—*Med. News.*

Congenital Lateral Deviations of the Uterus and their Relations with Peri-Uterine Tumors, and the Mechanism of Labor.—Professor Lazarewitch, in a contribution to the *Annales de Gynakologie*, wherein he discusses congenital lateral deviations of the uterus, and their relations with peri-

uterine tumors and the mechanism of labor, sets forth the following propositions:

1. *Congenital retro-position* of the uterus depends upon the shortening of the sacro-uterine ligaments. In this position of the uterus readily originate:

a. Anteversion or anteflexion.

b. The location of tumors behind or above the body of the uterus.

c. During pregnancy and confinement deviation of the neck of the uterus behind or above, and sacciform dilatation of the anterior wall of its lower segment.

d. During recovery after confinement anteversion and retroversion are very pronounced.

2. *Congenital ante-positions of the uterus* depend upon shortening of the anterior wall of the vagina. In this position of the uterus there occur frequently:

a. Version and flexion of the organ posteriorly.

b. The occurrence of tumors anterior to the organ.

c. During pregnancy and confinement deviation of the neck of the uterus before and above, and sacciform dilatation of the posterior wall of its inferior segment.

3. Congenital lateral displacements, right or left, of the uterus, depend upon failure in the development of the broad ligament, the ligament of the ovary, the sacro-uterine ligament, or upon failure in the development of the wall of the vagina, by which the uterus is brought into a closer relation with the pelvis. Lateral deviations of the uterus dispose:

a. To lateral version and to lateral flexion of the organ.

b. To a condition in which tumors may occur before or behind the uterus.

c. During pregnancy or confinement to a latero-version of the uterus, and to unilateral sacciform dilatation of its lower segment.

d. During the sequelæ of confinement to latero-version of the uterus.—*Medical News.*

III.—DISEASES OF CHILDREN.

Observations on the Cause and Treatment of Infantile Eczema and Allied Eruptions.—Henry T. Byford, M. D., read the following before the Chicago Medical Society, on August 17, 1885.

In the winter of 1880, I was called to attend Mrs. R., in confinement with her fifth child. Two of her other four had been born dead; the other two, born apparently healthy and died in convulsions at the ages of three and ten months. But the last had, before death, suffered from a scaby eruption, and become somewhat emaciated, but had not, as far as I could determine, been considered syphilitic. The child born at this time was, at first, apparently healthy, had the appearance of an ordinary

eczema pustulosum, and which affected its scalp and different parts of the body. The only other noticeable symptom was progressive emaciation.

A physician seeing the child for the first time at the age of three weeks, would have been excusable, without the family history, in considering this a strumous case, and in treating it with cod-liver oil. Minute doses of calomel and mercurial inunctions quickly transformed the unsightly, emaciated sufferer into a healthy, well-nourished infant.

In the summer of 1876, I was called upon to treat a young child, Augustus G., with pustular eczema confined to the scalp, excessive nocturnal restlessness and progressive emaciation. This being the first child there being neither copper-colored areolæ nor other characteristics of a syphilide, but for the acknowledgment of the father of a former, but seemingly perfectly cured attack of syphilis (an acknowledgment not always made), mercurials would, as a rule, have been avoided by an attending physician. Yet the eczema rapidly disappeared, and the infant was soon gaining in flesh upon calomel powders and mercurial inunctions.

To contrast with these syphilitic cases, I wish to relate another in which I know there was no possibility of a syphilitic taint, as I had been in daily communicaton with the father for three years before his marriage, and have often treated his family since. The patient, E. H., one year old, was unusually fat and well nourished, and had an eczema on the head which spread over the body in patches, in spite of the prolonged local treatment of one of our most intelligent practitioners. I recommended one-fifth of a grain of calomel to be given twice a day, and an ointment composed of one dram of carbolic acid in an ounce of the oxide of zinc ointment. After ten powders had been taken the eruption began to give up some of its area, and had almost disappeared by the time the thirty powders, first prescribed, were gone. Soon afterward the eruption began to spread again, but was promptly cured by more of the powders. The child, having been overfed, was of course, put on a proper diet, by diluting the milk and infant food it was already taking, and withdrawing all other. The child has since remained well.

I have notes of a case of eczema, attended in 1880, in which the eruption extended to the eyelids, causing such conjunctival sensitiveness that the child lay motionless in the cradle, with its eyes bandaged by day and night. Every attempt to move or remove its bandages elicited either moans or screams. I thought the child, which was a little over a year old, the most miserable one I had ever seen. I prescribed quarter-grain doses of calomel twice a day, to be given until they produced a laxative effect, then once a day only. Carbolized oxide of zinc ointment (ʒj to ℥j) and a borax eye-water were prescribed for external use. Improvement did not take place until the powders had been taken regularly for several days, when it commenced, and, in a few days, rendered the little

patient comfortable, and able to endure a moderate light. When, later, the calomel treatment was neglected, the case relapsed, in spite of external applications; but a return to it soon cured the eruption, and improved the condition of the patient.

Many other severe cases, of the disease have come under my care, and whether the eruption confined itself to the head or ran all over the body, whether the patient was syphilitic or not, strumous or plethora, they were all similarly affected by calomel. When treated without this remedy, their recovery has usually been very slow, uncertain, and often temporary.

It is an old popular belief, not uttterly unfounded, I think, that the rapid drying up of these head eruptions by strong applications does some harm to the system. With the aid of calomel and external applications, I have rapidly dried up scores of such head eruptions, without having observed any but good results, and consider the coexisting digestive disorders as the causes of any head symptoms that may arise.

The frequency of occurrence of eczema in infants, the large size and great activity of the liver in early life, and the striking, I might say specific, action of the calomel, have led me to associate liver indigestion with infantile symptoms of eczematous nature in the relation of cause and effect. Even in many syphilitic cases the sallow complexion of the skin, and nocturnal restlessness, have seemed to indicate liver disorder of syphilitic origin. In these cases, the alterative powders often produce an amelioration in the skin troubles, sooner than they could through the direct action upon the blood poison; and hence the mercury should be used so as to affect the liver as well as the blood.

A properly regulated diet is necessary, and in some cases is all that need be recommended. But the negative action of diet alone, and the increased debility that would in the meantime, follow with strumous children, whose disordered and debilitated digestive organs would be slow to assume healthy, vigorous function, makes it very injudicious to wait for such action. Some of my earlier cases were cured without any regulation of diet.

While disordered digestion is usually considered an important factor in certain instances, and a regulated diet, with occasional laxative doses of mercury, are often advised, I know of no authority who has considered derangement of the liver, and its accompanying digestive disorders, as the chief predisposing cause, nor of one who has recommended calomel (or its equivalent of blue mass or mercury with chalk) as the chief remedy for the vast majority of cases. In fact, most authors remind the reader that no one remedy can be generally relied upon.

From the fact that many of the earlier cases got well without a regulated diet, that so much calomel produced such prompt relief, and that improved digestive power usually follows, rather than attends, the action

of the remedy, I am led to believe that the cure is brought about, not merely by improvement in digestion, but by a removal of waste, irritating materials from the system, which are often the main exciting cause of the eruption. And from the great efficiency of mercurial over other laxatives, I believe that the irritating materials are not only in the retained fæcal matter, but also in the blood—the products of imperfect digestive assimilation and excretion. There is no doubt that mercurials do much to clear up the urine and to restore normal ingredients to the fæces.

Occasional doses of phosphate of sodium, and other saline aperients, act in a similar way, but much less promptly. And the same may be said of castor oil, which has proved efficacious in the hands of L. Duncan Bulkley (*Jour. Am. Med. Assoc.*, July 25).

The strumous and nervous conditions so often observed may, I think, be the causes or effects of the disordered digestive organs, but are seldom the direct causes of the eruptions. Even the beneficial action of cod-liver oil is explainable upon dietetic principles; for pure oil is a much more proper and natural aliment for young children than oatmeal, potatoes, fresh bread, stale cow's milk, and many other table articles of diet that are daily imposed upon their immature stomachs. This oil helps, like castor-oil, to remove fæcal accumulations. With infants fat is a normal ingredient of the healthy fæcas.

My excuse for ever resorting to such heroic dosing with calomel, was that a large proportion of my severe cases was traceable to a syphilitic origin; and noticing that the cases bore the remedy so well, I began to try it where I only suspected syphilis, and finally in all cases. I have usually given from a quarter to an eighth-grain powder, according to the age, twice a day, leaving directions that they should be discontinued as soon as purgation commenced, and afterward given as often as the bowels would tolerate them without much disturbance. Their effect, more than the age of the patient, determines their size and frequency of administration.

As children over two and one-half years are very liable to be salivated, I usually give them a single purgative dose of calomel every six or eight days, and trust to diet and other remedies in the meantime. For instance I was called two years ago to see a boy four years old suffering with patches of eczema about the head and upper part of body, who, although under active medical treatment, had been in about the same condition for several months, except that he was getting worse. While poorly nourished and pale, he was a hearty eater, and was fed upon eggs, potatoes, oatmeal and other stimulating food, with fruit sufficient to keep the bowels regular. I ordered two grains of calomel to be given at bedtime, and some powders containing each one grain of extract of pancreas, three grains of bicarb. of sodium, and eight grains of subnitrate of bismuth; one before each meal. The diet was restricted to milk, beef

extract, bread, toast, crackers, rice and fruits. In six days, finding some improvement, I ordered the same medicines and diet. In a week more I found him greatly improved in general health and partly rid of the rash. Recovery was uninterrupted, rapid and permanent, the parents having in the meantime learned how to feed him.

Acute cases may, of course, be greatly benefitted by protecting the inflamed skin from all external irritation. This may be done by keeping it constantly covered by simple cerate purified by a few grains of carbolic or salicylic acid to the ounce, or by vaseline, the object being, as already stated, to protect, not to medicate, the skin. In chronic cases, I know of nothing that will allay the itching and stimulate the skin to healthy action as quickly as an ointment composed of one dram of carbolic acid to the ounce of oxide of zinc ointment, constantly applied. I have used this formula in nearly all chronic cases, and have found the combination soothing instead of irritating.

That I am somewhat out of fashion with my calomel I will admit. In one of our latest and best exponents of the present state of dermatological science, I find the following sentence: "Lastly, patients of both classes (of eczema) are to be saved from mercury, arsenic and iodide of potassium." I can only offer as my excuse, that I have found the treatment under consideration almost uniformly successful, and that I would like to do what little I can to aid others in simplifying the management of this most fickle of all diseases, in finding the centre of this Chinese puzzle of dermatology.

Finally, I would like to say that I do not think it really best to treat the majority of cases in this heroic manner, being usually forced into it by the critical impatience of parents and friends, or by the impossibility of securing a prolonged and intelligent attention to the diet. I would also like to remind any who may chance to thus prescribe calomel, that unless they give it with a proper understanding of the conditions and requirements of the case, they will be just as apt to fail with it as druggists and nurses are apt to fail in curing malaria with quinine, and much more liable to do injury.—*Journal of American Med. Association.*

We call attention to advertisement of Peptonized Beef in this issue. It would appear that the problem of an extractive of digested beef has been solved by Prof. Preston B. Rose, formerly of the Michigan State University, and its preparation attempted upon a scale commensurate with its importance. The general agents of this preparation, Messrs. Chapman, Green & Co., of Chicago, will be pleased to forward samples as per their advertisement.

Ringer's English Bin-Oxide—The materia medica contains no remedy of equal value to woman. Price, $1. Clarke & Co., Importers, 819 Arch street, Philadelphia.

Foreign Gleanings.

PREMATURE INDUCTION OF LABOR BY MEANS OF THE INDUCED CURRENT.—By Dr. J. Syroniätnikerow.

According to the author the induced electrical current has been but very rarely employed for this purpose, as he knows only of two cases reported by v. Grünewaldt and one by Tippakow. Three methods may be employed in the application:

1. External electrization, in which both electrodes are applied externally, either over the region of the uterus or one pole over the abdomen and the other in the lumbo-sacral region.

2. Internal electrization, in which both electrodes are introduced into the sexual parts.

3. Combined electrization: one electrode on the cervix and the other on the abdomen over the uterus.

The author prefers internal electrization, for which he considers Duchenne's apparatus most applicable, both electrodes terminating in a flexible plate. In his own case, however, the author employed the combined method.

A young woman 26 years of age, who was in her second pregnancy, was delivered two years previously by craniotomy of the child after an unsuccessful attempt to apply the forceps. Six weeks after this first labor the patient became pregnant again. The author waited until the thirty-seventh week of gestation, when he concluded to induce labor artificially. On May 3d. he applied the primary faradic current of a one-cell battery for five minutes. One hour later slight labor pains set in. From the 4th to the 6th he applied a little stronger current for ten minutes, and from the 7th to the 9th the current twice for fifteen minutes. The pain increased, and on the 10th the author introduced a Barnes dilator, No. 1, until the os was sufficiently dilated, when he performed podalic version, and extracted a living child. Childbed was normal. (*Deutsche Med. Zeitung.* W. H. W.

MULTIPLE PREGNANCY. — A Russian physician, Dr. F. Poljakew, reports the following case.

A peasant woman, 27 years of age, married nine years, had menstruated regularly every three weeks and six days since her fifteenth year. She had borne six children, always single births. She menstruated for the last time October 14, 1884. In the beginning of February she consulted a physician for an enormous abdominal growth which interfered with respiration. An external examination revealed an enormous distension of the uterus, of a rounded oval form, with the fundus in the scrobiculum cordis. To the right of the linea alba faint heart sounds

could be heard, and to the left small portions of the fetus could be felt.

On February 28th, at 8 p.m., one child was born dead, some minutes later, a second, both breech deliveries; and then successively, after intervals of a few minutes each, *three* more children were born with the head presenting. Each was contained in an amniotic sac and the last four were living at the time of birth but died soon afterward. All of these fœtuses together had but *one* placenta, to which the umbilical cords were attached in its periphery. Its weight was 585 grms. All of the children were of the female sex and weighed on an average 590 grms., and were from 29 to 31 centimetres long, with the exception of the first, whose weight was 935 grms. and length 41 ctm. This child showed an appearance of elephantiasis, and on its extremities several fingers and toes were wanting, (*Deutsche Med. Zeitung.*) W.H.W.

A Hen's Egg in the Vagina. — The following contribution to the chapter on foreign bodies in the vagina is made by a Swiss physician, Dr. Gonner. A young married woman had made an excursion with her husband, from which both returned late in the evening. The wife went to bed, but the husband, who was slightly intoxicated, felt hungry, and looked for an egg. He then returned to bed, and placed the egg between his wife's thighs, saying he "wanted to warm it." Suddenly it slipped into the vagina, and attempts were made by both to extricate it, but without success. As the woman feared its presence might prove injurious, and it caused also some difficulty in urination, a physician was called in. Upon examination he found the egg high up in the anterior fornix of the vagina, where its pressure caused dysuria. The point of the finger could be passed behind it up to the cervix only with great difficulty. The question was now, how to remove the egg without breaking it. On account of the narrowness of the vagina it was impossible to hook the finger behind it and bring it down in this way. The only available instrument could be Breisky's forceps, used for the extraction of an egg-shaped pessary. As this was not at hand, the author emptied the bladder and made pressure externally over the symphysis pubis, and caused the foreign body to glide along the finger in the vagina. This succeeded, and no difficulty was further experienced in removing it entire from the vagina.

Self-Constructed Pessaries. Another Swiss physician, Dr. Flury, after commenting upon the readiness with which people in his section of the country help themselves by self-amputation of various members of the body, etc, reports the following: An old woman, 74 years of age, complained of a fetid discharge from the vagina. On interrogation it was learned that she had consulted a number of physicians many years ago for prolapsus of the vagina. Various pessaries were inserted, but none of them were retained. The patient then constructed a ring herself, and

wore it *thirty years*, obtaining perfect relief from her trouble. In the last few years, however, she had some abdominal pains, and for the last few months a profuse discharge, which she correctly attributed to the presence of the pessary; but upon the appearance of this flow the pains ceased. A large circular ring with a small opening in the center was found in the vagina, and imparted to the touch a feeling as if it had been cut out of sandstone. As the pessary could not be removed in its present shape, it had to be cut through with a pair of scissors, when it could be drawn out and extracted lengthwise. As the apparatus broke during extraction, its composition was found to be a soft inner material with a hard outer covering resembling a calcareous shell. The broken mass was so large that two hands could not remove it at once from the basin in which it had been placed. The whole posterior portion of the vagina was changed in appearance, and glittered in various colors, but there was no deeper loss of substance, nor any adhesions. No cervix or uterus could be felt, and a resisting body in the posterior pouch of the vagina proved to be a firm cicatrix with a small opening, into which the sound could pass no further than the breadth of a finger. The anterior wall of the vagina was prolapsed.

Upon closer inquiry it was learned that the pessary had been introduced 32 years before. In the first year it was occasionally removed for cleansing, but afterwards it became impossible to extract it, and the woman thought nothing further could be done. It remained in situ 31 years. The portio vaginalis shrank, but not the ring.

The author says that one of these self-constructed pessaries was shown him upon a previous occasion by an old lady 78 years old, who had just made one for herself. It somewhat resembled a combination of a Mayer ring and Hodge pessary. A stout but flexible piece of twig is bent into the shape of a ring, and then dipped alternately into wax and covered with oakum a number of times, until it is large enough. It is held as a secret, and only occasionally is a woman found who has learned the art of making them. (*Deutsche Med. Zeit.*) W. H. W.

Bibliography.

Journal of the British Gynæcological Society. Edited by FANCOURT BARNES, M.D. Part II., July, 1885. London: Smith, Eder & Co.

In the April number of the *American Journal of Obstetrics* there appeared a letter from the eminent English obstetrician and gynecologist, Robert Barnes, who complains bitterly of the manner in which the practice of gynecology is "hand-cuffed" by the authorities of most of the public hospitals of London. It seems that the right to operate is not conceded the obstetricians and gynecologists, who are compelled to turn

over their cases, as soon as surgical interference is required, to the surgeons. If *surgical* gynecology wishes to flourish it must seek a more favorable soil in the establishment of private hospitals. Even the Obstetrical Society, from whom it could be righteously expected that it would boldly champion the cause of the British gynecologists, seems to have been diverted from its original purpose, and this growing dissatisfaction culminated in the appointment of a man for president who does not represent the views of the prominent gynecologists. These were constrained therefore to seek an independent field for cultivation and have accordingly founded the British Gynecological Society.

The strength of this association is evident from the fact that almost every one of the noted gynecologists of Great Britain, whose names are known on this side of the water as well as in their own country, have enrolled themselves as members. Dr. Meadows was chosen president and the inaugural meeting was held with a membership of more than two hundred foundation Fellows.

Under the anspices of this Society the British Gynecological Journal was started and Dr. Fancourt Barnes chosen editor. The first number of this journal (which seems to be a quarterly) appeared in April. It was not our good fortune to obtain this number, but we have no doubt it is equally as interesting as the one before us, for July. The present number contains all the papers read during the meetings held from April 8th to May 27th, and we may truthfully say that we have rarely picked up a journal devoted exclusively to obstetrics and gynecology containing more interesting matter. We may hardly expect less, however, when we bear in mind that such men as Lawson Tait, Bantock, Barnes, Aveling, Routh, and others are the contributors. Tait has contributed not less than four papers, all on subjects with which his name is most intimately connected. At the first meeting he reported three cases of double pyosalpinx, in all of which the extirpation of the tubes ended with recovery. At a subsequent meeting he showed ten specimens of double pyosalpinx, in which the operation had been very difficult on account of adhesions, and yet all of the patients made easy, complete and rapid recoveries. Thus far, Mr. Tait has been eminently successful; in his opinion, chronic salpingitis with occlusion and distension of the tubes can only be cured by the removal of the diseased organs. Another case reported by Dr. Aveling did not terminate so successfully, as the patient died of acute peritonitis on the eighth day, whilst a similar operation performed by Dr. Bantock for hydrosalpinx again ended with complete recovery. All of these papers are of exceedingly great interest, because this subject is comparatively new. Diseases of the tubes are either not at all or but very unsatisfactorily described in most of our text-books on diseases of women; nevertheless, the obscurity that surrounds these cases, especially as regards diagnosis and the question of treatment, ought to

be a sufficient incentive for their earnest and careful study. We must look therefore upon these papers as important contributions to this class of diseases of the uterine appendages.

A very important essay, which provoked a rather caustic discussion, is contributed by Thos. More Madden, of Dublin, entitled "Some Points in the Treatment of Uterine Myomata." Our author charges his confreres with a too great desire to operate on these cases unnecessarily, thereby jeopardizing the lives of their patients. He attempts to prove by statistics that the operations of hysterectomy and myomotomy are unjustifiable on account of the great mortality which follows them. He asserts that uterine tumors never prove fatal by their mere presence, and death must be attributed directly to the operation. Whilst he therefore almost entirely rejects hysterectomy and myomotomy, he proposes enucleation even for interstitial tumors if they can be reached per vaginam, and removal by traction according to the method proposed by Emmet. Above all, however, he advises to wait and trust to the absorbent powers of nature at the menopause, and finally makes a plea for the medical treatment of these cases. He recommends as agents to be employed, ergot (for the hemorrhage), iodide of potassium, and the bromides of potassium and ammonium.

This attack, made in the presence of men distinguished for these operations, caused, as might be expected, a bitter opposition, especially on the part of Lawson Tait and Dr. Bantock, who demanded a special evening for the critical discussion of the subject of operative treatment of fibromyomata, in which they vindicated removal of these tumors by laparotomy.

In striking contrast to the views expressed in the paper just mentioned, is a very able essay contributed by our own countryman, Horatio Bigelow of Boston, under the heading of "Gynecological Surgery." Dr. Bigelow took up the three topics of vaginal extirpation of the cancerous uteus, laparotomy for fibromyomata, and Listerism. He shows himself a warm advocate of all three of these measures, and cites in their favor the constantly growing success that follows these operations, in the percentage of recoveries. Dr. Bigelow had just returned from Berlin, where he saw Schroeder, Martin, Gusserow and others operate, all under strict antiseptic precautions, and he extols their methods and results. He recommends extirpation of the uterus for malignant disease, and points to to the fact that Martin, of Berlin, has extirpated the uterus sixty times with but five deaths, as an argument in favor of this operation.

Other interesting papers which we have not time nor space to notice more extensively are: "Plural Monstrosities," by Mr. Lamprey, "Calculous Pyelitis," by Mr. Reeves; Dr. Chalmers on "Sloughing of the Vagina," Dr. Benninton on "Puerperal Tetanus," etc.

We observe however that but very few of the members participate in

the discussions, and aside from the remarks on fibromyomata of the uterus by Tait and Bantock, already mentioned above, the discussions are not very satisfactory. One singular feature we have noticed, that questions proposed during the meetings, even when personally directed, seem not to be answered. We regret this the more, as some of them are of great importance and well worthy a reply.

The customary reviews, and a summary of gynecology and obstetrics, including the reports of various other societies, etc., close the number, which all in all makes the impression of solidity and earnestness of purpose on the part of the contributors and the editor, Fancourt Barnes.

W. H. W.

THE Rumford Chemical Works, Providence, R.I., manufacturers of Professor Horsford's Acid Phosphate, have recently purchased a commodious building and warehouse near their present location, where they propose to move their business a few months hence. This purchase has been necessitated by the demands of their large and increasing business, and it is pleasant to record such an evidence of well deserved success and prosperity.

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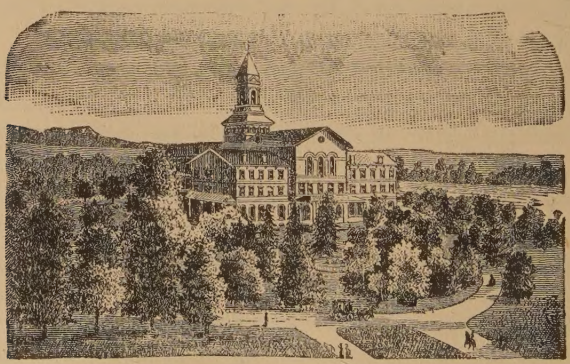

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